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A SELECTIVE MICROFILM EDITION

PART II (1879–1886)

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> University Publications of America Frederick, Maryland 1987

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Thomas A. Edison Papers

at.

Rutgers, The State University

endorsed by National Historical Publications and Records Commission 18 June 1981

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The original documents in this edition are from the archive at the Edison National Historic Site at West Orange, New Jersey.

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THOMAS A. EDISON PAPERS

A SELECTIVE MICROFILM EDITION PART II (1879-1886)

REEL 53

DOCUMENT FILE SERIES (DOC-13)

D-80-001 through D-80-020 ("Bergmann, S." through "Electric Light - General")

1880 DOCUMENT FILE

D-00-001	bergmann, S.
D-80-002	Deafness
D-80-003	Drexel, Morgan & Company [not filmed]
D-80-004	Edison, T.A General
D-80-005	Edison, T.A Accounts [not filmed]
D-80-006	Edison, T.A Advice
D-80-007	Edison, T.A Articles
D-80-008	Edison, T.A Autograph and Photograph Requests [not filmed]
D-80-009	Edison, T.A Bills and Receipts [not filmed]
D-80-010	Edison, T.A Bills of Lading [not filmed]
D-80-011	Edison, T.A Book and Journal Orders
D-80-012	Edison, T.A Clubs and Societies
D-80-013	Edison, T.A Creditors [not filmed]
D-80-014	Edison, T.A Employment
D-80-015	Edison, T.A Family
D-80-016	Edison, T.A Insurance
D-80-017	Edison, T.A Payroll Receipts [not filmed]
D-80-018	Edison, T.A Unsolicited Inquiries [not filmed]
D-80-019	Edison, T.A Visitors [not filmed]
D-80-020	Electric Light - General
D-80-021	Electric Light - Edison Electric Lamp Company - General
D-80-022	Electric Light - Edison Electric Lamp Company - Accounts [not filmed]
D-80-023	Electric Light - Edison Electric Light Company
D-80-024	Electric Light - Edison Electric Light Company of Europe, Ltd.
D-80-025	[Number not used]
D-80-026	Electric Light - Foreign

D-80-027 Electric Pen

D-80-028 Exhibitions - Paris Electrical Exhibition

D-80-029 Menlo Park Laboratory - Incoming [not filmed]

D-80-030 Menio Park Laboratory - Internal

D-80-031 Menlo Park Laboratory - Outgoing [not filmed]

D-80-032 Mining - General

D-80-033 Mining - Edison Ore Milling Company, Ltd.

D-80-034 Mining - Mines and Ores

D-80-035 Mining - Spring Valley Hydraulic Gold Company

D-80-037

D-80-036

[Number not used]

D-80-038 Phonograph

D-80-039 Railroad - Electric

D-80-040 Railroad - Port Huron Railway Company

D-80-041 Science

D-80-042 Telegraph

D-80-043 Telephone - General

D-80-044 Telephone - Carbon Button/Chalk Cylinder Orders [not filmed]

D-80-045 Telephone - Edison Telephone Company of Europe, Ltd. - Accounts

[not filmed]

D-80-046 Telephone - Foreign - General

D-80-047 Telephone - Foreign - Chile D-80-048

Telephone - Foreign - Europe

D-80-049 Telephone - Foreign - United Kingdom

1880. Bergmann, S. (D-80-001)

This folder contains correspondence and other documents relating to the business of Signumb Bergmann, a manufacturer of electrical equipment in New Port City, when the state of the state

Approximately 30 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence regarding orders for, and shipments of, telephones lists of telephones by serial number; receipts concerning telephone orders for Europe; bills.

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S. BERGMANN

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NEW AND IMPROVED PRUD HOMME BATTERIES A SPECIALTY

New York Jame 8, 1880 Ding. J. A. Edwinson

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Remo from 7 a Edison tro thousand on a federal Person on a Carrow Person

1880. Deafness (D-80-002)

Following the appearance in early 1878 of articles about the phonograph, which drew attention to his own deathess, Edison began receiving inquiries about his proposed invention of a hearing aid. (See Thomas A. Edison Papers Microfilm Edition, Part. J. 135-166). This folder contains correspondence inquiring about the current state of the invention.

Approximately 10 percent of the documents have been filmed. These items received significant replies or were written by individuals associated with Edison.

FRANK D. HATFIELD,

COLGATE & COMPANY,
Perfumers and Soap Manufacturers,
new york.

Menta Caner . 4. 6. your lind reday, to my Enquire, of you might daily reed and you have my Since I through you you Country. Or sint we to droute you just once more, it can find no eather nightle duel anyon suggest to they, is a one closes of both such any suitable to their in the En . It is a some come bring (in which I share that the cutach of you laboratory subruce troughting August look transport to par on for him on good notine in askinging) you and not kindly mail me a nepople such as you believe would Suf-out Sound from the sangele . I have then you sailer sither by you hand on on mother one in a mountabline as you may assume that I will find Jung you for you trouble. If some it must have recurse to you If longs in our stay in the lan a nightle would have to carjoin to pleasin hope of this En apartime afor a supple is insulted to project out of all by our stand to surface work preclude the bying of ones here any on field of upon a pillon, the En being is superiorising to preserve internal. Proposition of the preserve internal. Sondon Dee 9 98

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GENERAL OFFICE Menlo Cark . d.f. Parlis No ship you this eve po mail an audiphone with he compliments of the inventor Rd. Rhode, who is, de presentidecirape. Mr. R. Sayo Le. chas written to vace premudindens. mapromised that the accdiptions would be shipped to you in due time from chiery, reach you safely! Mishing Jaw to complis Very Respectfully James ada Millery

1880. Drexel, Morgan & Company (D-80-003) [not filmed]

This folder contains correspondence about routine financial transactions undertaken by Drexel, Morgan & Company for Edison or his companies. Material relating to Drexel, Morgan & Company's role as a financier of Edison's electric light and telephone ventures can be found in folders on those subjects.

1880. Edison, T.A. - General (D-80-004)

This folder contains documents, primarily correspondence, covering a wide valve of subjects. Some of the material relates to personal matters. Also included are documents that deal with more than one subject, such as a letter about both the electric light and the telephone. Documents concerning subjects that do not fall under the main subject categories are also filled in this folder.

Approximately 80 percent of the documents have been filmed. Duplicate copies of correspondence, third-party correspondence unrelated to Edison, and unanswered fan mail have not been filmed. Unsolicited requests for personal favors, for loans and exhibits of inventions, and for information about Edison have not been filmed except in cases where a significant answer has been found.

Chicago Electrical Society,

of the executive committee of The Gleage Blectrical Dociety. I was requested to ask of you the fact of the loan or faccion of one of your new horisahor, electric lamps. Our society wish to he in the van a great favor, and a) his cond for me should you legard our request formally. Our next meeting will be the we will appreciate your stindness, The society is very auxious to passess the lamp, It you womply falsone forward by express to me COA Trong Respectfully grounds Happy newyears.

#1, New York, /2/80 & have to leave newbork Tomorran may & and friends come tonight initeed of tomornant might Kindly reply to Wards Office Dr. muishead 21 paid-stored OX Hr Came Newark Jan 2/80 JA Edison Jir is there any prospect for me with the Company Mr. Lowery told me when you were ready he would give me chance I am Truly to J. T Sourray

Dan 3, 1880

EIMER & AMEND Importers,

205, 207 & 209 THIRD AVENUE, COR. 18th St.,

Mu Gokstannags 1876 Law In account Man

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HALF RATE MESSAGES.

THE WESTERN UNION TELEGRAPH COMPANY.

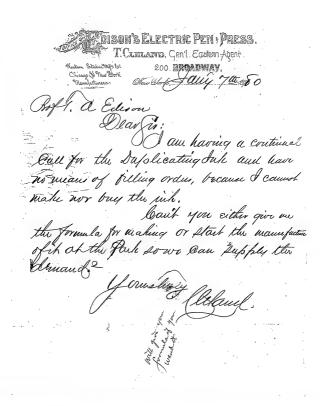
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In Thomas Edison

Mente Park M.

Draw Sir

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6 Lombart Ct col & go London Set January Addo. My Dear Saison My hearty congratulations to your Rus we with the Sight. The Lelegram livent your re Knied Report you have not repliced to I foresum because of not weaking to authenticate that description possebly for atta good seasons. On the whole of such of good ax well you did not righty. I hope you will be all to affilian proposed makerial enough to give a practical achievition of it has I have raid nothing about the object of Athereone mission to america as when he lift I was in Pasis taking a chock much needed wat I have no doubt however the matter was well considered by the Board Lefore taking to confortant a Rhop ar sanding Johnson away from his work how. I know may about the questro, to feed the gravely of the setuation owing to the peculianties of the English falent law which have already been fully explained to you. If we pursue in getting ren Desalainer there can de no doubt but that we shall have the Ben Company at our meres, If we fail.

in getting it - well I don't leke to what week be the consequences, tohum well explain it. That your procence will contribute large to the carlier Reancie ag the attorney Coneral I think, There can be no doubt and I then be it is to make thee alean to your and all one collaboral bearings of the ence hallbun have been sent out to the heasons I made well that you knowed a time and for a whort time. The red and the was roque well do gow good. You may be come of a most ferthering scoophion, here : you canny fact to enjoy granely. If you come I shall be happy to have you a acel to hospetaleties of my home where you are here and whall endeavour in every way to make your visit a pleasant eneal I feel Run Hat et would re. yours very true

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T. A. EDISON

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[ENCLOSURE]

A. H. RITCHIE,

New York, Jany 12 1880

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The Western Anion Telegraph Company, Letter____

From Cincinnati O Jan 16 1880

Sheet___

Thomas A Edwar Esq Menlo-Bank nf

Trus Edico; I desire to go to Mexico and antial america, but having no business in view, see no immediate prospect of returning to those parts.

The idea struck me, however, that foreibly you had not dispases of your right to the "light" for those parts, and you, knowing my knowledge of the people, customs, and language of the "Rispan Americans" republies, might give me the opportunity I so much derive. Or Should the light be ont of your hands entirely, could you forward this little to fuch parties as would be mast likely to have the matter in charge, together with ouch comment as you might choose to make in my behalf.

I congratulate you upon your recent success, the greatest of the age. We anxiously want the riving of the Mento-Park Sun

Very Truly Friend

Chas H. Billings Well : Tel Office Ancinnate' O

Mr. J. A. Idida Den In The members of the Franklin habitute me all ver much excited ohnt your land and every day at least had a dozan as k me sheeter we are not to have it for our meeting on the 21 the Onferbridge Othe M. S. Merit who saw it in operation, thought you withethe induced to let us for to philition me of the trucker over, and a bother filament He proposes to describe it and I have for made for him some lander Mids of the Generalm the morning funds ite has he is very enthusiashe gent it, and his shocked the support

in defail his seworks will be sen interesting. he in your letter plast year he have promised the lamp as som as it should be holich exhibited at the Tark I hope this sepect will be grantes bledging myself that it will be only inchibited and represed to you without delan of you so direct. Then me of the nales ones by Experes and much other Mad minus. levelong pro fer we are aufulshort of

Washington /15/1880 Prof. Edin Mul. Park. Only two of Frank
Thoman's meters working
tend author there today Tell 6. A Johnson to come over heit tweight without He can adjust Thomson's OK answer -Arani he will dome My Painter 303 pm

tay of the Franklin institute has requested me & give some account of my very interesting visit to gown laborating at the next meeting on Nedwerry bie. impressed with your lights, believing that you have accomplished what all other investigators in the

same field have failers being carbonized, and in donig. Confeer also one of the langer. that I came to Mento an imperfect lange Sark diposed to be, would answer the purpose if not skeptical, at least simply to show its construc vez critical, knowing -two . by factorie Experience have no dolf that the difficulties in the way you are overwhelmed with of a practical solution similar letter & request of the public finemete but it is the henaly of - cent illumination. greatures , and if gon I should like very can conveniently illigi much to be able to show me Thus for I while The members of the Institute be much indebted one of the paper horse she four truly the before burning & one after

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From Ro. Philas Philade 17-Tur Edison mas Edin dvill you he Kind Our Jan lund hough to go in no your tommer afternoon about two (2) oclock Bedel & Dan derant & spent no yor & tuming to you Sto Robinson Ofternam about to oclveto -- / Bussu Robinson well be on hand at two much time to Reprod Jasu 17 th, T. A. EDISON,

> He le Robinson Will be on hand at two oclock but will not have much time to spend Taldison

Wes merced a Bentation of Cause = you of Town come of the Cause with the come of the country wants Thiladilphia Jan. 18. 1880 hugdear Edison: -I have waited all this afternoon in the hope of getting) you on my wire as mr. Robinson tota me this morning) you land you would be on the look out for me about & oclock I was quite disappointed that you did not appear; because I wanted to ask you two questions the answers to which I wanted tought. In the first place, mr. Frank Thomson, Den. Migr.

Tempylvania R. B. Das of invited a few of free to got over to mento back within private car some day this week, and I wanted to know whether it would be convenient for you to liave is come and whether there is any choice of days. Of there is to be anything special on any particular day, that is the day we want to come. The party will be composed of come of our very best people and I would like to have them be things " at their best. Of the num.

ber will be the distinguished these offices as that he can physiologist, Dr. Weir mitchell. have a complete apparatus The other day & described made for experiment. to lim your currous observa-I wanted also to try the tion upon the effect produced motograph receiver from by rapid mechanical vibrahere to mento the afternoon. tions, and its analogy to hime is now in efactout that produced by a intermit. Condition and I wanted to tent udiced current, We compare your transmitters was very much interested in there with those his Clute the fact, execully with reftathed to me on from evence to nervous sensibility Harrisburg the other day. He was spoken to me about Dr. Sentto wanted me to it leveral times and has ask is you could spare now asked me if I would him some of your north Carolina monagite and also ask you, if not too much Executive for the cabriel of trouble, if you could rig Duch platimen sands as you up come lost of a mai had plunty of, with the locality? Contrivance just to show him Please and regally your on wire tomorrow ! Reorge I Barker.

my ables repeat Dus. Cable Cay Neydear Sir, Sam here again on my very time. I should like to call on you before leaving but fear to do so without permiss. because I see by the papers that you are harassed with visitors and I have not The slightest wish to intrude anysecf Hoping you Lyours are quite well, Genden, dear his, Consommisse we four succeely W. E. Dodge JuBate avielGenleManagere the Sub-Rubber Raller a new idea will by t = plo fur white you can about newly land

Chicago Electrical Society,

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The American Shoe Tip Co.

Boston, fault 23 1870

J. A. Edison
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that he hopes com to be able to get your shore of the money of the Est. Telephone (6)

Vinction de Jany 84 18

LA Edison Esq., Mendo Parx W.J.

Friend Edison;

Orecasion to address you from this place. and while doing so thought it rad out of place to recall to your mind our former acquaintence while dovertone in the Cincennate W.M. of s.

You were then I think "Report of "Lewis" "De worse" Lewis "De worse" Well will adams I think the Colin

Jink water."

S was in hopes that the letter referred to would be read you by receive as personal attention from you which would have offered me very grad satisfaction by deasure, and at the same times water have provided me with a memorito of the I. I. Edison of today.

S am at present vagayed in Photography. but of secure, attl'hander offer the sounder of ting.

end one you thater of myself & daughter. Time may have altered muy features some but The "shadow" may are your money of me.

I have of course right myself posted in chetrical matters, and think that there is a gard time coming for these founding with the seconds and it is for the view to engaging activity in the field that I now address you in loopes of recovering attention.

I desire to know as fully as possible he details of your systems of lettice lighting, and would be gled to obtain circulars; if you have them" out." I wish also to require regarding the means to be adopted to while, it introduce the system into asserted use, and if town, city, or state rights may be obtained. I foot the latter, I would like to according to could reason by some your services of use to the company, they may be not according to the latter of use it is to according to the latter of mould like to according to convenience to the company, they may be according to a service of use to the company. I see that from your acquaintence to subscribe

Fraternally yours, Willown & Opr.

are stolen do Ime
The extreme foror to
Keep all proofs sent
together and return them

Jul Jamin, og

Leven somether of journe terms with Meser sonsy, Robinson of 61 15 way, I there

be very glad to introduce & Jon at glutternan of large syfering in money, who will have the secided from most man, as to the broadution of ones re, & whose ideas I think him in accord with your own He will be here Lyon, x levrel Lend or bring line & deine. His views have. reference to reducing grees, but only to the mothers do link found veins. Heis reasoning is the slight terous it is correct, about reductions, commele with his about formation. would like to meet link, tradvise me,

Kristiania Jany 16 10 Jonas Wentton

Shristianio, Holbergey, 23 Jan. 264 1880 Jila Prof. J. N. Edison

Dear Sir!

Jour poor of the 185 Now. 1879 was duly received. Please receive my through special pricture. Raving been delayed by sich-ness and writing for anseress from the most promised minulogists in these countries, I will now at less assure your green preliting Torit. This mural is very rece, probably the greatest lot in the world being in the laboratory of thisticaid and it is not much over 100 gram. Am-

receiving a four grows thereof some years ago.

The mineral is found only in Am. way on the islands in the bay of Brevig (a town a few mile from the stand) It is possible to receive it sometimes but in very bund grantities from the former living on these I should she price amonths first. I am respectfully yours any truly yours way truly

New York Jany 28 th 80

J. A. Eclison Eng. Meulo Park A.J.,

Dear Fir: I have yours of the 232

inch, acknowledging receipt of description of Dynamometer, and expressing desire for some

of my publications on Electro Metallurgy. I enclose in this some slips out from the Engineering to Mining formal of March 16 7 23

430 - 1878, in relation to Refining of Copper Le. as they are the only ones I have importunately I feel obliged to ask you to return them after

perusal.

I will, in a short time send year expires of subsequent publications in the line of refining Veclan De

Keepin S. S. Keeth. Dend them Gock we

Ahotograylıs, Engravings, 76 NASSAU STREET. New York Day 30 1880 Prof Thos W. Edisor Sear Sir Me have now in stook handsomely frommed the picture for a Marin Sellamine")

Jan have not purchaseothe Some cleenhore Swould be

avery low cost. also indicated to me tunt you are willing to have some one investigate two under La Mur x purgetural direction has having time to devate to it yoursely - Wil arrangement you would be willing to master garding the watter, into stil at a Thos: A. Edison Es.

2./2. 1880 WA Dear Lin I received your Rind letter only yestenday - I play en very say in another M town, Therefore letters sometime travel after one gente a good while - but after "all I received it and ? Thank you for it I thank? you also very warmly for having accepted my ledicar toon which sprang allton, gether of the administration of home for your good servines — I need your Expose in Sinibness with the greatest

interest - as I near you to the Concert on the 14th Jan in everything concerning you - of course I will await my, Drooklyn, 9 Know too well, how your self of your kind invitation to come tome is absorbed, I am no Evision at and see you as all - and I have soon as 9 will no time for any be she to do so, Thing - it I had, -you do'd not underland me alltogether - I had no ivea what Lee me in Menlo_ Park - and I would ever of inviting force you to in=

vent somether beautiful to strains of my Violin I am dear Lin I hope - I am Jucceed - 5 am Lure

Receiv 'n OTICE AT THE TOP teleglig help Bays

with Edison that county clow the prature to the natives to Cor 4th + Hampshire to Theres a high loved family have that claim oclationship with you Ed her a Doctor

sition as Of Don't you think I would be uture developments
ights + C - Ihave a Holl overer acchee my felskan to ins for your puestions to talk on your q to

on this day last but downy informed me you were in for a plant of you fait in this wife four polary or hours pervice required.

The old man a phones.

The Dhanghup

Dear Tom allow me to Congratilate ye on buene of Electric Light hising if may illuminate your road to the haghest spinnashe of fame. Bent you honographic better per Dety of Para - understand. Telephonic Communication is about A be initiated in this bity Send me the papers To Rox 443. Ris de Janeiro 5 Geby 1880.

T. A. EDISON.

Menlo Park, N. J., Feel - Th Frank. M. Louighbui. Cor Colden + Blocker St newark See if Sutterland owns interest in Canadison if so get it

Sticklin & Graffin Eng Dan Di At the Palent go privace in the Polyform as som as pisale as we are about levely to let it nh Yang D. Louis Broken Lly 10,80 Offer 4/2 Deun Duridy

Jar Philo Jah 11,80 Dr CSiller on Ind 13,50

Ref 0009h 100 / phia.

M. J. A. Edwan -

Day Min

Being engaged in some investigation of the rounders of greach and opening that the transfer and gives the best results as an analyses of the security address my sife to you to ask of it would, and for you to ablain and you if laps not to ablain and you he for me to ablain and you will form. Allow rope to at their matter years is your Makes rope to a court of the survivant of tops to the add to record the courts of the graphs will the survivant of tops to the add to record the courts and the survival of th

Since these the your.

Jane ming a mirrophone.

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of your adjusted the transmitters

Bojing hat your will not

think me inpertinent in this addressing your

rejectfully yours.

O. Gaille.

1603- The St.

May dear Edison: Dr. Reiler is well known to us here in Philadelphia as an investigator in Sound. He're mother assisted Helm - holly in come of his most important investigations of you can grant his request, or know you will need no wrong to do so. Howetherty Barker. Philas. Heb. 14th 1880

" newyork Isly 11/80 Thomas a Edison, The Shall I find you at horne tomorrower times for half an hours

Then Joke, Geby 11th 1880 Write good little oranger copies that you were intending to go than in the spring; also that hossible " Buchelu meeded a little sest and would also leave for a spell, it accused to that possibly you and I might agree whom some arrangement, wherek & could become general managel for you so as to give you more listele but resh. practicul knowledge of the but it has occurred to me, that could advance your interests by my knowledge Detti mathematic and the technical acquirements The future of the application of Mechanies is one of great promise, and is a field where inventors can reaf great rewards, besides the many lentative experiwents which you are constantly making would afford to anyone who is studying

unequalled advantages todemoustrate theory by practice. Journal Jakonamer in the ecco ... Core de lenard and The nece would

The Mento Hark Manufacturing Co.,
New World 19th 1880.

The recipt (at Mechania) of U) four Mackershick (at Mechania) of U) four Mackershick for Mackershick for which plane except one should go knowly forward empling in our line to Woomer Mew Markershing in our line to

Mour Truly Dio, W, Letin

Sund Regrets Foto My Dear Ediem I purused Mr. J. a. Buden the I will write you a line and expurs my hope that you availed fo to his house on ledresh every in the occurrent y a aception to the mining luqueers. He has I believe aent you

a formal initation
Please consider purely
begged to gofors to g

R Lating 2

Pet 16/po

[ENCLOSURE]

Mrs Mrs. James A. Burden At Home!

Nedwordwy, www.ing. Hedwary, wighteen bi nt half pust cight zedarki to meet the members of the American Sortitute of Mining Engineers.

Resort

Drevel Hange Rowsmy power atty

Draw de no the four here

it is too tamplicated see

Kange

7/ West Post of the Chien

[ON BACK OF PRECEDING PAGE]

Griffin.

Try and fix up Bargmann

A M + C. see his letters you can

probably binange to have the forward &

Collect his drafts

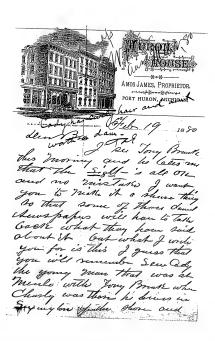
Illinois Central Railroad Company. matteson Illa Station, Febry 18 1880 Thos A Edison mento Park A.J. Lear Sin, For many mouths I'vos-Present & anti- very but always dismissed the though leeling you were pressed with more important business, and one ILLINOIS CENTRAL RAILROAD COMP letter would be a waste of the Station. Haverson not or can you not invent so simple a thing as asho I am. The school mean will pun a bewing trachino who boarded abyour Fathers the by electricity? If so please and me price, namero so winter you were home sich at the Fint & who assisted I may become the pappy you in inventing that Supler possessor of it! I have a & Duedruplex! I have followed " lovely Inheler y mileon to 8 How through all this years as standing in The corner of my your Efforts have been (Velegh) of but am unthe to published through the brees run it low I am going bletty I allow metiliais am trule Stadoffour soleces! Sout Sugleyon one aduly byour

pell, however in your libe of swenten, Please fam only noth a refly, Only name is not much but the powers.

Thus The powers.

(heateron Cook Co

see



he has always wanted to go back and work for you he is not afraid of work he is willing to do any Thing from Corning the hood to book Keeping he is a good fellow I would go him a place at something has Father you to Floreda I Emplow ground the reports dout you think They look better will send you them regular Every mouth and also hope I can send you a dividual before long flow Cluster and let me Know what you can do Da Sew

The Edison Telephone Company of London, Limital, nacionaldas Chambres, Queon Unterior Gioveres. Conedam III y 9 788 o Dr Willis of the quion S. S. Mis consin with whom I crossed lash summer the is desirous of variabling through your Laboratory and chaping hands with the Groprietor Please accord him the dual priviles and Charge the Some of the To Your foreign Embarry (H. Schuson Je! The Doctor is a good feller 11/13 at I am on the Prop moonlight with the dish

THE WESTERN UNION TELEGRAPH COMPANY.
THE WESTERN UNION TELEGRAPH COMPANY.

Analysis of the Secretary of the Secretary of the Company of the Secretary of the Se

fay what you please thank 319 bast 12 to gottle Start 12 St. gottle Start 22° 15 40. Mr Thomas Edison Mento Oart N. J. Seur Sir, This morning my attention was drawn to a fine in the Milhdoffhia Receord, purporting to be statements made by you. on The success of your bletine Light. You State. " Lit a man get up on invention that is a mere toy, and of no . carthly . use nothing is said about it. But as soon as a man gets up an invention that is of great. commercial importance, that copflicts with long estaplished Monopolies, Then they is a general rush to endeator to pull him down, and show after all that he has accomplished nothing. Now I venture to say you never, extered, a greater truth that that I have experience Short truth myself. I have laboured night and day with my mind & Strength. for 30

years of my life. To construct a perfect,

Orifrigerator. Five years ago. I claim that I accomplished the work and The Patent Office gave me Two Patents. " One for a family. Refrigerator. The Other for bar Refrigerator. As soon as I Built a Bar and tested the frinciple before the Public. It was pronounced a perfect success by, all closes, what was the result. as soon as the Stock yand Companies between It Louis & Boston see, and become convinced, that I had a car that would carry fresh beef , any distance, and at all times of the year. in a perfect state of preservation. They formed a viny to pervent me in running my bar. got the Rail Roads in with them. To bluff me down. because I could carry 40 beeves in my bar where only 18 \$ 20 live cattle could be transported. It would reduce One half the frieght on beef to the R. R. Esz, and It would do away with all Hock yards for the simple reason. That cony battle rasser could butcher his own beever, where ever fatter lin the vienty of a Or Road) and ship them to any distant Market: This shoney Monofoly has to resorted to very mode of

Konessbety Febry 1980 JH Comfines

of Stricting; to Bucher me and of any Palent. It got the Contiviting Power in their own hands, and have used any meany to discourage me in order to induce me to fold my Patent for a trifling sum. But I have stuck and many To my Patents; up to the Dresses time, and mow after 5 years profiting. Shay hazin to gulle And I helicie to day, that I have the largest and of Money, or my side and of course, the balance of Money or my side and of course, the balance of Money and thy interest in your succept, is next to my own. I hape down to be able to present your with what I hope down to be able to present your with as me me a tolorado, two lay follow, hilled tingue in bolorado in the party of triggeth as you were brught in you bely of the york.

With my kindle in the bety of the York.

With my kindest wishy I remain Obespectfull;

THE WESTERN UNION TELEGRAPH COMPANY It is toward holiday NOTICE

Western Union Telegraph Company,

Thus A. Edison

Friend Tom

I think of thinning of the bondage of this affect, which has lasted elenen years, and stake out for the engineering field. That is, in the lostical department, I fell cromped here, my full inadvalanding and parablical experience in comphostic wires and machinery will fit me for the management construction and working any. Thing, from your Quadruples down through the Velegisch field to the Telephone and Dishiot systems even unto the Elistics Light, I have begat pasted and am quite sip in understand, so as to operate prochestly by setting up any and a too the few massinerey at all kinds of stations, you may remember that I was one of the few in Cinamiatic Office that

willityn furnished J. F. Sterens a full skilch diagram of the Stoke Repeaters which was some for those days, I wish a letter of introduction from you ,"to whom it may , Concern, that will assist me in warking up"a better claim, in Some of The departments abone refored to, suit your conhemence as to time as I have a safe thin here \$ 80 % for month and will not let go file I hook something better, better, should you happen upon a "missing link, Mar you could employ by recommending the undersigned I will appreciate it also, I fear you have been bared Considerally by Operators & other friends () who haddy knew you in your untiring patient Toil at the fast of the Ladder above the tap of which you now stone a hirt from you as to my ability on points named is all that I ask of you in the letter That I want of you in the letter satisfy one body as to habits we besides beginning the Bolance THE GUERRANT

Lectro Ingraving Cachine

MACHINES SOLD WITH LIMITED TERRITORY TO USE THEM IN.

Address, G. M. GUERRANT.

P. O. BOX. 157.

Asf. Thomas J. Ellion ,

A Called to be you heveral days ago but acled not do so I have a Valuable involving that a will be issued soon and it manhed to su if I could get you through your agent is fireign Counthies to introduce it for must be proper monapenent how done but lettle wint of proper monapenent how done but lettle wint when I could like to know if you with do this I lector slip of sugrang done with one of my monations of this yad saw this when in the infancy, and I value to ask! a favor of you which would to of great value to my that is to give me criticated saying your what is to give me criticated saying your look seem the machine the from the look Centification as to be work from the lading thinks of the Country years affected as the country from the lading thinks of the Country

THE WESTERN UNION TELEGRAPH COMPANY. READ THE NOTICE AT THE TOP.

American Company.

Nophins, Mo., Wareh/31890 DeanSu In looking over some Papers the Other day and Seeing four mane my mind was Carried bookward 15 years and I was led to wonder of you were the Edison that we use to Case little al the boy that alex Stephenson Conductor on the Port Huran division Called his boy it also Come lo my mind if you are the same of any recollection of old times end Come across you in the while and excitement of dresent hopes and ambition of you ever recalled to mind farties you were then acquanted with Sometimes I Catch myself asking the question where such a one is & for instance McKenge ap Mit Comous Hum of Baltimore Is lost all trace of them of your find time you might drop me a few lines I use to be at Utica yours al Kennedy

THE GUERRANT ectro Engraving Machine,

Address G. M. GUERRANT

Danville, Va, Mar 4th 1880

Inof Thomas A. Edison

Geor bis

your extensed favor full to hond

giving me address of your agent is

the boldon and baying you would signe

Orthicals for me if not officionable of

the Euclosed archicalic is officionable would

be thought for any thing you may San

for it wish your primition I will private

to your agent in London one of my new

invaliding as seen as I con get one ready

yours buy Rejentful

fill prierrant

Phase added me at Charleston S. C.

Drexel, Morgan'iz Ca on it I send it some Only I hope it will be New York march St. 1880 a better booking Ring Friend Edison, Thase with me a few lines , saying in general from your prospects are good or bether how ever or something like Rat_ a lady in England who One mish to ablige, wants Jour anthograph - If your a Photograph to Chare please put your Eguature

When did 37 W lear ment or the true have have have been work work to the him here hundry shour heard work something the stand work of the

Paris Mch 8.80 920 8.m. Edison Menle Such 173 Expenses carrying lustings obliged me to draw night Charlys bills thing I faid avoilh search have Depolity by Cable above White gong entracting by mailed fifth for natification 33-

EDWIN M. FOX,

Attorney and Counselor at Law, mo 140 hassaull

Morse 24. Now York, Mel 13 1880

My dear Ale;

by Griffin 1400 - 7000 in wills and my cheek for 400.

The Galance Dwile seve

You in two or three days. My hind asked me for the

Company not of the free of as as seemed for the free and as seemed for the free aning too on to ap. Keep my solves of my beauty of the free of my of few days of milling for offer days of the formally the too

The Celisem Telephene Company of Landen Lim Mansion Huse Chumbers, 11. Queen of Gentleria Significations of the Company of the 19 Words a Minute Through Malta Mibralton Cable 980 Knots Paper rallen Relay T. A. EDISON, Menlo Park, N. J., March 15th 1880. Mys March 15-1880 Do you wish to make such an arrangement as professed to Mr. Carman Thursday If so can you see me Today with a view to immediate action Please aux JA H Harbrock 29 paid WE don't go into Enterprises in such a precipitous

John R. Porter.
Grossease H Lowrey.
Geo. Water Street.
Chat Reacts Street.
Geo. S. Hamilin.
Win. L. Porter.
P. O. Box 1836.

Portor, Lowrey, Soren & Stone, Attorneys & Counsellors at Law: So's Bread G. NewYork.

My dear Edison:

Enclosed please find two bills of Mr. Serrell to Drexel.

Morgan & Go. and to Fabbri and Lowrey, for patents to be issued

for recent improvements. The bills are sent to me by the Fabbris

for my approval, of course. Do you thank they should be taken

out? I assume that in some of these foreign countries we could

get on very well with the principal points covered, whereas in

this country we would have to cover everything, because of con
tests with other people, who seek here for similar protection.

I have arranged with Dr. Green to go down to Menlo on
Thursday at one o'clock, to have a talk with you en the subject of
the Metograph. I repeated substantially what you said, and I
think it is wise and desirable that you should make your view of
present relations with the Western Union entirely clear to Dr.
Green. Do not hesitate to express yourself with the same definiteness that you did to me. It will be useful to both parties to
understand each other fully.

Please let me have the bills and letters back by mails

with the expression of your opinion and wishes as to whether these Patents should be taken out in all these countries.

Very truly yours

Thos. A. Edison, Esq.

Enclosures:

Letters & bills of L. W. Serrell.

. Ilerand a Mills of N. W. Serrell.

"hos. A. Eddarn, Fag.

Епедените:

Yory truly yours

with the expression of your entained and whates as to whother esciriumos eventi LL, at tro neuta od birode udrades

MDDLESEX COUNTY CLERK'S OFFICE

New-Brunswick, N. J., Mcn. 16 1880.

dear Sii,

In regard to blanch against "Ments Pane" lots for ordered I am unable to give a convert blanch for lieux
enthrust making a computer gearch for
Convey inner, while for do not ask for
leads, I concluded not to make the
pane without you say or ask in will
make the blanch more respectively, the
statement you sent done you show
act the Conveyance, please for me
Know what to do, and I will complete learch in quiet order,

C. D. Kin Cline

John Lover Derler: Lowreng, Leven V Stene.

Grown Stane.

Microcy V Counsellers at Lum

Maliter.

Fo. 1007 1836.

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Microcy V Counsellers at Lum

No. 1. 1007 1836.

Dear Sir:

Me dowry directs me to write
you that Dr brew and he will come out to,
Ululo Park towerms on the three reboth train
try thefy
Francis Jordan

Thomas a Edison Esq. Slends Parpe. N.J. Wows

Mar 18180

le Steile

Leony Clark

Mos.

Make a complet cearch on lots

from Jaace Thornales Conveyance

They have

Solding

Western Electric Manufacturing Company, of Chicago, Electro-Medical Department, Eastern Supply Depot Ds. T. CLELAND, AGENT. Onfl. a Elina Sul. Dear Sir:

Dear Sir:

Jour an just in receipt of fortal form Ist Polis telling one I will have to fortal apply to yourself or har Batchelor for the formula for the Eclison Dafolicating Jul. and as we are my quarty out it will be a great accommentation of Jan. or it downs. of can get in form. I blear let me have it this week and gratty obeign

My Mar 18,50 T Chland

Mestern Union Gelegraph Company New York Muckly 1880 George B. Prosectt, Electri<u>ci</u>ant That Edison Esq Mento Park N. 1 My dear Chwalin. I am very much obliged in receiving y last week about the labe of the lunger to alshows It had prefored of course a differ affermative answer which certainly would have plened botter my Curopear friends and myself. May I baneso you may more! I took the leasty a couple of weeks ago to send you a copy of the Dry Placer amalgameter Co / Denue Colores / panjalet heasterd Benneth Prend I am a "lette interest is His patent and its Summ. Ochago you contracted I teld you this or early as 18.17, whereyou prime She find place and Bennoth lotter to me, about she tutple, and faid to me " a good plan ming when

Over and over age's sward times . A good plan! I recolled these words of you very distindly. Need I tay this there works out of your genial mouth have kept up my life and mind Languine hopes for botto times to come en in the dull hundren of duling bledriceins apartment tops to taking to much of your valueble line, and finish by rejuntary you most respiritfully, sugestly and politily. to tend me a few lines through your Sentry expriming your extremes opinion of this Amelyameter, to the effect of cruiding or Neviving my hopes is our patent and its hoped for finantial coults is the mind futur. I am sure you can tell from a place, if it probably is going to be the "immere thing ' Some parter claim it to be Will you ablige me Ane extension by Book Soy to Bok Chats If Bennett's wach does as herays Rom 20 - 195 Bivey

Mar 20, 80 M 20 TAldison

Will be in Menco His Evening Edwin in Fox

THE WESTERN UNION TELEGRAPH COMPANY.

THE WESTERN WAS AND THE WESTERN WITH THE WESTERN WAS AND THE WESTERN WAS A

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T. A. EDISON, Menlo Park, N. J. Mar 20 1880. I be Reeff so divay hy Camot come to right

Dear Sir you have no doubt Temperand Herald, The Organ union of New Jeney. The paper will be one pearl old the first of about, and while it has provid a enccess in co far as it has build, and only such \$ 3.00, yes the atmost the hand The struggle Has been great be desire how to scatter the paper throng hout The state, where we feel ende it will do grod, his we

has no mean to do this, and had necessared the spring to solical the spring to solical the pertinent rates and as and as a solid me for small me made for mand be broad gratifiely received.

Your hus Respectfully.

Mos J. A. Beecher.

J. C. REIFF. New York, Mich 20 long than theyour comed not some trught as Let me Know what night Law anxions tree learn what was down lad Eving Admask me, otherwise Imir

paid in Rute on mo

The Edison Telephone Campany of Landan Limited, My Dear Edison London Web 1880. I have now 4 series of \$15 Cells Each- Feller: on my Lamps byex I have not enough quantity & Supply 2 lamps weithout causing a slight Variation in the 1er when the 2nd is put of and on. The Electro Motive force of 45 cells is not sufficient Eicher I find in requires 50. 6 Gring the up to a superior Has jex. I have therefore today ordered 26 additional Cues to Gring my 4 deries of 45 up to 4 of 50 = & costs like There and I expect Typidall Monison soon and I am deternimed & do the thing justice - I have two Elegand Bronze Mights on my Desk - one on either side of my writing Tablet: The socket Lawip are in harmony with the Jegures & make, a really Elegant Combination . Them I have to Brackets outto Wace with handsome relief Tho. hanging behind thew :

The Edison Telephone Company of London Simited. The effect of the E. L. who which the Very much admired = My Circuit is really made outho Wall & Desk so as to be seen ax a glance - The multiple are excitquite a good deal of interest Will try I give you an Idea how it looks 1 - Box to dock main cht out of reach Coprover and to chow Putting on to Shutting of of House dights to Battery in 2+3. Wall Brackets 4- Cord (7 Strand Copper) - with another Cord Tap. 5 x 6 Bronze Knights Rolding a Stoff with Edison E. L. Willes"= 7. main condit Eds exposed to show open ext.

The Edison Telephone Company of London Limital, Mansion House Chambers, 11. Queen Victoria Livert, E. C. My Desk is a Chaudsome Souble slope Mehogony - The to To the right on the wave. I have fixed a regular Telephone. a Loud Speaken (Cash Im) - and one of my Bell Tel. Pattern Clockwork receives - Thus I Can give Every book of Telephone demonstration - Sound tain I have a Crossley- a Blake, x au Edison Fransmitter - On my wall I have The 3 Diagrams of the Carbon Principle - nicely framed - on a chelf I have the model made by you for me when in nyork lately welleding the Paper Speaker (which by the by Tacks Splendid. Salso have atmace Thougraph ou view = My windows Can be under adsolutely dark. I have 2 good gas fiels. I am Thus particular in giving you The arrangement & Contents of any Office because I want you to Kans What is was that a couple organ

The Edison Telephone Campung of London Simital, Mansion House Chambers. 11. Queen Victoria Street. E.C. friends oan back nightendan Mess MacDonald Gent manage and Chimery Chief Editor of the London Times vicine me by appointment at 5 pm .- to remain a few winntes . White II rechthew - Bose Brown & a couple of Others being stationed Where they could do the most grad Telephonically = I had the day before were mentioned & Mac Donald that I had the dights in Operation - He said "Lie Come Hee them at once thring our Editor if I may": * they Carrie - 'The heaviest grews in acc England -Order of exercises - A. Eplanation of Elisas position in 78. 6 scientists & fellow airestigations - in 72 to newshapers rother visiting Laborator - Paint - St any fault - one of two great openess of Character not seclusive by nature B. Description of works - dight & Kilik machines Laboratory we at mento C- Explanation of Lauf- carbon Multige

The Edison Telephone Compuny of London Simital, Mansim House Chambers, 11. Queen Victoria Street, E.C. of AMOLO WHITE. But Inscrede and will are finered, a re to maintenance of cht contraction to preservation uniform resistance to A. Exhibit of damps in variety of way - Ehiliar tring - Houvering - audition delighted. Comprehended point unde on Once as to adjusting course of couply in accordance with demand Remark. "Once not an authority on Electrical matters": Result of exhibit - all I could disin-E. Ehelit of telephone excelory califing room) Explanation P.O. context. Etracted unqualified opinion 20. people in Error in daining Telephone - or in attempting restrict its growth: A. Exhibit Telephones in my room - inclusione of - Various adjustments Edismian, Microphoniel rave - Normana Wire - Induction He to - Soft. Loud + Conversational - delighted= y. Explained in one hours Lecture

The Edison Telephone Campany of London Limited. Mansian House Chembers, 11. Queven Victoria Glovet z.c. listened to with ut nont attention accasionally interrupted by entilliquet question. Microphone chown & 60 no magnifies of frend - but simply a Sound . or Telephone. Transmitter-ie Ederius Telephone - Deagrams explained - In short whole endject made so clear as to Elicit remark "now I comprehend the Edison Kughe Prece Controvery as I never did before I am indeed gratified + obliged for this ducid exclanation " Prece heartily excoriated by me & shown to have applied for Pating for applying micro to reletante with Edisons Bliphones in his Elicited justification of your Course torrand Orica. Thex expression of opinion that reither Kiegles or Prece understood the principe of the miaropdone assecdate by McDonald -

The EdisonTelephoneCompany of LondonSimital. onrion House Chumbers, Rooms 8713. 11. Queen Victoria, Street, E. C. "I visited the P.O. lately & Prese Chorord we your Telephones at work on a wire upon which Telegraph Busto were at work, A which gave out a loud crackling sound - I Could not understand a word *Could searcely hear any thing but the noise - Then I was shown a Mecrophone Transmitter Paul recina Which talked beautifully - The recience being absolutely dead diering Cessating of conversation - (I subsequently found That this wine only ran into the basement The difference of Conditions Were nox explained to me. but I saw there was an extrardinary difference flike the dust there at rest - This excited My suspicions, that I said nothing as from having your Telephones in daily operation receiving our reports from Reulens I Knew its Capabilities . VI thought it best to allow Orecan to play his hart

The Edizon Telephone Company of London Simital, Alansim House Chambers, 11, Queen Victòria Livert, z. c. to the end . I came away convinced Infact without the Shodow of adough that an attempt had been deliberated hade to decine me. I mean to make use of the fact at the proper time. Jone what you have today chown me Especially in The & the Effech of Induction, I am now Certain your relephone was on a long wine or Colled wine - their on a local CK+" = Na! Na! muts for us: (White & I are going to send completent Experts to the 120. & interview Preca in this same line reget additional testimony against him -) Interview Chened at of Fun Closer at you. The dondon Times is more than Ever Edisonian : It is now a partigue - a Sattelite . so to shear I harguined in advance that no Mention chould be made as the Paper of what they had been Explained Why vo. The benefit will be felt rather than seen

The Edison Telephone Company of London Simital, Manxion House Chambors, 11. Queen Victoria Street, E.C. I in the extre back to andonthe nex 18 Edisorian article wire have -Gorrand. didn't Evenknow of The continplated Visit . He has not yet shoken to me - & consequence not seen the damps - such is the price of Variety. What is your Opinion of my 1st use of your Lambs? -Nothing new Felephonical - The new Contract is Vibrating Elecen your dawyers & the company's Bouverie is still Electionering aualgamation is in Statu qua cam rendering a him against Bergmann for Coak of repairs Coch him life the Bevil - Levanues him when in myork so he can't Complain - my little Interest there - may go to keer before I'll he taken advantage on E. S.



76 Market Street Chicago, Mak 76 1880

Dhos. a. Edwin Ery. Merolo Park. N.J.

Dear Set

What is the condition of my mind contened in Europe's thouse much many have you to my coole's stow is the Chaline life of Congressing, i Explice to head you a board of My from the mountains in may,

Respoly

Haontredadamcent from Europe yet,

READ THE NOTICE AT THE TOP

newark march 3/2/60. Im J. a. Edison, Dear Sir, suched check of f 15 in the second sected my heart thank for the pome he hope to do much good into this seed junch have some May the Lord, who has so underfully ludowed jur into mental powers, bless ju more Juns Somly Mrs J. a. Reacher.

Petersing Meaner 31 7500 Eury dear di -I sent you flager auramosty the fact that I and figure the correcce many went - It was telling on me to minat -I get rested, I shall tackle ameting lees my object in centing you is to vay that you once aparte of to much of this you wer acres in your experiments that would be good to develope y as one reliable enough and he got kned of to develope the - of you have night, of the kind on hand now, bear me in mind. I will sall to you are on my way to new york.

1 : June gul and and all the 21 48 18 2 18 18 W. F. wenner dorg. " ... The Constant of North the second second



THEODORE GUBELMAN,

79 NEWARK AVENUE & 304 HENDERSON STREET,

Jersey City, April 2 to 1880

Mr. Thomas a. Edison

Sear Sir

Your reply at hand. Would greatly prefer to make a Litting my self at my gallery as it would be somewhat out of place to send a portrait to a worlds fair which was not my entire work and as I will be the only photographer from this state represented there I would very much like to have your portrait in my exhibit.

In case you should arrange it you may telegraph your coming and I will agree not to delay you over twenty winetes

I would further agree that no other use will be made of the postrait than designatian yours Respectfully

Theofubelman

THE WESTER! Contre you ESTERN UNION TELEGRAPH COMPA Rockwell "

THE WESTERN UNION TELEGRAPH COMPANY.

THE WESTERN COMPANY.

TH

аре 6.80 New Haven Conn 6 JA Edison Just returned referring to your Jarrety 5: 7 th williams Can more rember three at once Do it too Late; Better mail sample C. E. Buell 21 NH and to NH New York 6 J. A Edison Expect to be at mento Park from five thirty to six thirty Today & M. Barton

process of working tailings arrangement with your Co in regard to this section of the country - I can Experiments = on, & should be glad of give you any information in regard to this county of wanter I have been living Evil since I left cin insti last day ist - I was song your last day ist - I was song your him down this way when you were not time to grant your out time of Edipse - I have not then of Edipse - I have not then your frozens to success to sel the old temms meet with that proofinity they so richly historically have - I am our togget in mining a proofis its ene week hitter than fogging at the lay hitter than forging at the lay against than I J. Duch

one from suman form from the start to 1875 - do you link they have The pobate prese

T. A. EDISON,

Monlo Park, N. J., Oficil 15-1880.

american Machement
96 Fullow Str.
Ry.
Have not received Le Van's

report Prof Sweet has called allention to error in it

MaEdison

en -

Executivo Offico Western Union Telegraph Company NewYork Amstral b t

Edison the duful amount of corresp who hav had a long experience. busines, understands it fully and praetically and it will pequainted and endorsed with the prominent members of the trade, Especially New England Prostri where he have been business. He is more put of active employment and I wilt to enquie if you could not find his services valuable in connection with Yoly form", as he could attend to any branch of the business of not othermic disposed of the New . England Aginey mould be carefully managed in I hope you can let him take, hie. hande. the new enterprise and if there the least possible chance to afford an opening

for him will let me know of it, for I am cutain he would prove a most valuable man.

Yours sincerely

9.44/ent

TITIQUI

Whomezo all Heat

L'alliand " H. A. A. A. University of Perma Philada ager. 20,1870 my dear Edison: - Euclosed & lund you a letter from Prof. Dana in reply to your letter to me asking me to order for you the complete! Seignee, Please answer it. I have not een the Ellustrated Eintipe News to which you refet. But I have too much to do to undertake a newspaper controversy. I was comewhat inclined to reply to Popeis note, but didn't. mayer + morton's paper was not es bad after all in its effermental part; but its conclusions were abound, morin bad wough. Cordially yours . Reorge J. Garker. love paper in the Sanitary Engment

The American Pournal of Science and Arts,

New diven or. april 16 1880

My dear of Barben:

(We can form in money that with the field set of the late series of the late series of the change in form in the construction of the train of the first facility more in bound as good or many more in the contract of the

James 19. 10 sura

Me Carman

O would off

liked to have know if the

papers went all right.

I sent them in Mr. Edison

Mame thinking they would

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have have heard anything

Dirice about them

O will send the

Mole Briggers also

Mose Adams

tenet to a land

Dear John the call for the Renning old Jones set we thoughour and but in he I wattled of that occured in the Decaded that I rend ym triting. Hope you will jo mite particularily totay to ask of you exchange pho we of do den and Ill reifrocate hant your feit or back forde times rake I grapemit it I hope to drop in end

or you at Meulo Park once time. Im a might onl and will cit of to Leve your organ. hip Clarke of the defort has one of gome though febotos had it nas cracked in coming in fat, 40, me 2)3 and still vistams as all backlos thould be. am frank of your sneeds and hope I'm will get at the head of the head of the head of firen you her for and your old Friend

BREVOORT HOUSE, New York 11 12 3 12 1850

assowned my ny. Please loop wines 7 x 8 at ny + Whila Notan Edison " M 28 ape 28,80 Thosa Edison Mr Lowray Cannot go Today Porter Lowrey STS le Collecte

Centi dentisce, Illearn from m. august bubben that he acted, you in Jener Copacit newall in an about interpt together Firmel how a herries. Can for recom= · pr thurnegh = hobits.

Devould most this inquiring in Compidue Jung half B,

Ja E new that letter at one to yursend it?

Har yursend it?

Promailed to you my Libert Hymn please let me know, if you necessary it - marguette - michigan p. office wary trust pour adminer Suffenery;

om as a bidison tag The Major brought me, with your Complained - on his returns from the Each - a Juin open houting telephones, a Thomograph and a shotograph of yourself undorsed to me by - Bromal hand in which you were pleased to exprise your friends hip ! I want to express to you my appreciation of your remembracion, and I heart you will -consider me effusive, when I say, that I prize the latter gift most highly and hope to treasure of as a soriveries when your fame shoul have increased a hundred fold name and to have the pleasure of forming your fore and acquaintance, and I would to and in advance, that you will spend a portion of the time during your orich with me in chorotte

I send by express a proll package conlaining aspecimen of gold and a Cal a loken of my estum They are both the product of Cher the Deamins, at through of Lettle intru is valuable by fread in of its when par this country air Isabepore in forthe ly Jon will see by theretay littination to make Lander than the Cape stones The Darleys of my tative state have trooted superstition, that are much gum a talis man against evil or misfortime, and that it brings to its Ruppey powerson go huck, and succession all his venturos? Son Ladviseyou to Kupik in its foresent state and hopeth may realize for you all its my hical good fortune.
With timb regards.
Dann very peoply & mrs.

within to: Mr. Unced Levison JEHL 314 Lingston Lest Brooklyn, Way 27 1800

He book containing the deacription of Richards pump and am very much oblige for th.

I am sorry to say that I could not come on wednesday on Thursday as I was to busy.
My intention was to go but me Edwar wanted an experiment fur heat which presented me from going.

I ohale however true some lamps over some other time. Yours Truly Francis Jele

Ober Tom Thanks for your photo. I thouk like old times and I shall value it, highly . Nofe to see you some day Inly Your J. D. D. Laugue J. D. D. Laugue

Western Electric Manufacturing Company, of Chicago, Electro-Medical Department, Eastern Supply Depot, Dr. T. CLELAND, AGENT. 38 Ulliva Square 267-BROADWAY, NEW YORK T. a. Edison, On, Well Pack. Dear Gir: Thou wot yet leanus nowing the Duplicating Jul. When you were in the office a Never the or two ago you sport of suding a man over to make the for us. If you cannot final us the fraudo, and if not convinuent for you to let your man gover over him why not make us up two or thru gallow over at the pack? Office when you are grow. You'll like it. Has these got back yet? Set me hund about the Int form as T. A. EDISON,

Menlo Park, N. J., Junes 14 1880.

My Stepenson Brownst- 26 ours New york.

all right come -Sdison

No. 3 Masonic Hall, New Brunswick, N. J., Jinie 19 1850 Than I Elecon igt Acrow he to Ray, That the Sufcul har for the very as he intends to appeal, he of much have a precholdy Is do the speed hand to the feine down were be \$ 40 - twee the conony of the Reference of the

exe much see

LAW OFFICES OF J. KEARNY RICE,

her Road Election trad T. A. EDISON,

Monio Park, N. J., 2221 15 1880.

J K Rice, Masonic Hall, New Brunswie

New Brunswick

New Brunswick

p.D.

Send blank oppeal bond;
in Hankins case for signature

Dataison

J. 26.

Sent

Cor. Rush and Amber Streets Philadelphia, Pa, Jane 184 DEAT is! Kindness and informe us by return mil, when & whene me or one as can here an intersum with B. nu in reference of a very important matter to your a our interest what day and our - Col, It Trishmenth will

Benjamin & Caspary; 22 Rui Bihiri Smportars , 07 341 Broadway, No have the following inquiry form Arthur Dusni; What is the name of the company . in New york forminous with " Ypatrit And has this & agents or reporting May in trouble you with the regard to give us the derical informations in order to report the some to our correspondents? Uprulluid reply will greatly oblige Edilan Telephone Co of yours very Edwar Edight Co of Empl other wwentons, Edwar he

ABLE DEFICIENCY WESTERN Union Telegraph Company,
NEW YORK.
NEW YORK.
DECRETARY
DICTATED.

DICTATED.

Wear Dir:

Yours of June 16 th rec'd.

I have been very busy for

a few days past, and will
be for the next few days, af

ten which I will take up the
matter referred to in your let
ten.

J. S. SLONAKER,

DEALER IN FRESH AND SALTED MEATS,

Soale Sunden, Mich, 6/29-18870.

Oh as, A. Edifin Esq.

Meulo-Park K. St. DEar Sin.

Og this

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as expresent of or is it some affect of dage to latch the unwary of Daw a terrible suffered with Phenaries of Menalgia and word be willing to pay almost anything to effect dear and you would Confee afavor by repaying tothis and give your day af your Pay form original your can sent me any Catalogue sessing for this merits sworld life in

Jano Freely JA. C. Sucko yo J. S. Slonder

The median is improped advantaged to true Alectronian but it well relieve fucial parties heuralged -



2430 Redner Street, . Philadelphia, On, buly 10, 1880. Thomas a. Edison Esq. Mento Park, N. J. Lear Sir : - you wise please In himel enough to seemse the liberty of take in addressing you, but trust a perusal of this note may form sufficient ofology. My Lustand, W. a. Emgarde, a found ist known to you in forme years while you were acting as telegraph operator, and who while connected with New Brunswick, Elizabethe, EN. I.) Sun Jork, Boston, Cincinnati and Chicago faper, her made farnable and flearants mention of your inventions, and personal interesty has nequested me to address you. Mr. Engande is suffering with acute shumatism, and his affliction, and consequent non- employment, having . placed us in very defined circumstances, - we are without any resources whatener, and have fine little children defendent upon us, ha has thought you might In sufficiently charitably disposed to extend us some elight feereday and. The imallist

form will be thankfully accepted. Your will been for and your for any hindren Estamed, and Mr. Engande has resumed his fournalistic duties, any form extended will be duly remembered and amply recipron cated . Insting to your favian He and early consideration, of Huy Truly, Jours. Mrs. Mary b. Engande.

cation will spend the we and 26th there and askin you would take an interest lighting up that grounds is your electric light of wrote time that o thought three or four a lights would do better for outdo windtion than your lights. it that I would we him directly if you have aughting to say Thope you will be after go to the Boston meeting, owill not ask you to prisero any paper but I would like to have you

take one of those witte magneto that I saw the other meetings will be held in the could do that owly by the outers is the Rossissay and the war grown hards ack young pulsaly going paper may want of Wingesto Grant keeper

Dated READ THE NOTIC

July 16, 1880

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WESTERN ELECTRIC MANUFACTURING CO.
62-66 NEW CHUNCH STREET.
NEW YORK.

Thousand his request within this note to your huly folly Welly Wally Manga Paula, My

T. A. EDISON,

Menio Park, N. J., July /7 1880.

John W Lawson Bollaw Colonado

Make no elatiment that you represent me or have any relations with me or I shall stop your fer occolings through the newspapers there

set Falderon.

9

Seabright N.J. 22 Edison Meuls Park Nothing yet from you regarding Bankers time presses can you send immediately to Maniton Competent Engineer to examine water power and report requirements for immediately Opening Maniton road by Electric system either Water or steam - I will provide all expense reply here little mwell to day Gowan

G. E. Goverand July 22/80

you spring the scheme on me too suddenly requires to ten or fflam days to get a man - Banker is generally at his office days

Collect Cara

Jet Elison Eger Gent Liv. In sig. of the come of decence and art world an illustration of Jour Electric Seaconotion works? would be puparing to take larger pictur than those done for the Copinic of your works at that time True pais ago, and Juanuity you me specimens for four knilligspe Mespertfully Holencs 234 Broadway

il In Seal & to send me the mula & let me have an exclusive lifeto to it. amed he willing to take it On my leturn ups ah spenking a fain here it recurred the Sum of nome in advertising that your taly form Qued + a lencie the no doubt but he introduced with this What a new large demand County with Rucces. a Could be created for it. I Meuralgia is a try Tree. mild hear all the expense -alent affliction in England The retaining such a where + expecially in Scotland in its profile is we night I sent of a caple arrange between us. askin I'm what terms of I hope all think could acquire the right are forifin will at Mento

and the Electric Railway In have a food I true man in huis, I can truck him.

Ruid ce fands to ken

Backelon, Im rey truly doing its frade of 1. in of. the light still hurning. die en highlened un Scotch public a ford deal about four doings Mullione Ine down here in some prints Connected will the Seliphone but there are matter in which In individually had no hand I ho blame attache to An Iti a letter to day from Johnson. The sails

In the arigon 21. aug .

Menlo Park, N. J., July 26 1880.

Received from I a Edward twelve chance of Edward Interphone 60 (of Europe) stock

Ellen Adams

In Savark July 2 2th 110 Bloomfeld

The Carman I received your hour shows all night I also if your hould obliged he by sensing I sephone royally & that hall he a great chiefoment to me at this time as I am short of Money just how the Allen Adams

Oriental Hotel Manhattan Beach L. J. 29 UHotel. Come and spend Sunday there tening your wife and daughter answer es-HBanu THE WESTERN UNION TELEGRAPH CUMPANY manhattun Beach & Wedeson Stave no auso to my Clelynam of gesty come with Laura daughter to bruntal Hatel saty after mmy so I can see Banker

OFFICE OF

Aneha Lahe & Duha Canal Co., Consolidated No. 65 PINE STREET.

Thomas A. Edison Eig Menta Park it.

Hearlin: On my return from a little vacation Found your externed favor of July 21 th, and as unfavorable as the result of your investigation seems to have been, would like anyhow in the interest of the Company which Thave the honor to represent, to ack the favor of calling upon you any day and how which may such your conveniend between this and the 12th instant, in order to ascertain if some opening may not be found which may lead to own mutuat benefit

Soliciting your kind answer Premain Sir Yours Viry harty

Wordless

THE WESTERN UNON TELEGRAPH COMPANY.

THE WESTERN UNIN THE WESTERN

THE WESTERN UNION TELEGRAPH COMPANY.

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all right ORR

Dear Sir: After dearly such a service of said and such a s

Western Electric Manufacturing Company, of Chicago 267 BROADWAY, NEW YOR P.a. Edison, any, Mulo Par Dear In: Your favor of the 300 is at hand and contact with. I understand fully that Blis uww paid you for the ich he had of you, but that is not the point, I don't can for Blis or the weeten Election in the matter. I want to know what you will make two - five or ten gallows for and put it in jugo so I can bottle and latel it unself. I want Some of the ich in order to supply my customers and I cities want you to make it or let me make it, that all It has nothing to do with Bliss or the westen Electric. Please favor une with au answer au = midiately and oblige Jour Steland firmed low? win make it for me how some can you

Editor Scribning 7, 1880 "World's mik" Defairtment, Drur Ser. Will smight to inform one of agrice can, when she new metal sofrhen of in your deput mut as specheis mital in July, us, com be obtained? By dring so you will confar Mours Jank Edwin L Childs Johnson W. Y &

Novelty Rubber Company,

New Brunswick, N. f.

Dr. J. A. Elison tilliffens for our on new emelar to the one ignition of Trustant of mayor. Nor I made like to sum private me from the factory up to my love and Torquet at m. History house - phroided the three Celephones from you. One tobe one at Mr His house and one at my. don't feel like liveding no three them forgothe one at mr As house I have acco or some necks to buy one bar R. C. com almit youd (but count long less than a car load) which hu reperment I mide stand you are resurged you will please send it this by O. Q. C. net or would like there Morking send we the adder the boiler maker who made some monghes chim or you as man non is need of some of large aid y are a timble tomake. He gave m Keigh the address but he has last it. Aspecing that I am not locaing on tim or good nature too much I'm en Very stripechery

The American Fournal of Science and Arts,

JAMES D. & E. S. DANA, PROPRIETORS.

Deartir -

the deficiency in the 1st benefit to have the agent the heater the rolling was the the rolling was directed to go me the rate of our them, we have the alle the solume our thing. If we have the most find the walnut do morner was suite said you another copy authorize which your things can beauty which suitely make proof the difference in cost of building the tracks you have had -

(230 tous @ 10 pt to being ordered and it certain loves as though there were Interves in it. I have as yet got any wow from wetym pleaseles me knight by return mail what you think of it, Rienty and practically so a business undertaking ? I propose be grided by your opinion How is the motor solling

along ! Havery yet? In went the primise you me about the brotor? with Futilizer Sective light and age the Et celera borning things are begans were of alternate I were Stock and carry for manifold favor. Jorey Seduril M. Fra

tell Saturday have written you why EAD THE NOTICE AT THE TOP.

M-Park any 17, son All right Come any time a Present this Card at the Office here— Edison



Nevelty Bubber Company,

New Brunswick, N. g.

Salesroom, 43 Lispenard Street, New York.

Aug 19 1800

regul the fact along litershow secretary and keeps the sail will be to light al find and keeps a so so the rail from the A P. A. a. So the rail from the A P. A.

American Association for the Advancement of Science.
OFFICE OF THE FERNMENT SCRETTUR.
OFFICE OF THE FERNMENT SCRETTUR.
Mass, Aug. 211. 1880
My dear Edwon:

P chamned the facilities for power at the mass. Just.
Lechnology the other day when

dechnology the other day when I was in Boston. They have a steam engine there which will be ryming and from which you can have any power up to the horse. Will you not therefore make arrangerments to come on to the meeting and trying that small machine of yours and rim a dozen of 20 laugh with is? The large hall of the motinte where the meetings are held

is directly above the engine room two clores do that there will be a fine chance to run wires upe & light up that hall. Professor Ordway wondered if you could not bring on two machines so as to show transmission of power by electricity & will not askingon to read any papers this timed but I amoquite antious to have you come to this meeting because I think you will have a soods time of your presence will help the meeting). moreover, Backetor & Upton will then come too of guiss. as I have heard notting from Kriffin I inforthere is us electric light clock to be had. Cordially yours Beorge F. Barker.

J. C. REIFF. No. 52 BROADWA My dear Edism notivity that me Knows Menlo Park, N. J., 19 3 / 1880.

I a & chan Bhace you he as home the afamore of or will our your Sey B. B. Ectore 346 Bottom.

& Have received no aus, to telegram consequently

Today shall show he at home tomorrow

SB Eaton 18 yourd Ke 125pm I hunt tett you yet so when the trick - live lund More word in time of More 1°880-

Meulo Park steel plate portion of yourself - would you be willing to have it wased in the american Potrait gallery " with a biographical sketch to you of the steel place could not be spoud for the purpose, a du-plicate electrolype could be made at a smallexpense; Hope to hear fovor obly from Jan / 1. 6. Buttre

SUPPLEMENT

PART 55. Supplement No. 15.

PRICE 25 CENTS.

MERICAN Portrait CALLERY

With Biographical Sketches.

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New-York:

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k at til There J.A. Hanya had the him of melal tested yet for conductions? The I. FIN both markey

JEpt 9. 80 slightly alcoholic flavour as if fermented try Everything

6. Lombard Street thos a Pauson ho Stocalo Pack New Jersey Mb - Dear Saison Vasium Reserving after opening the fruit deader you as follows: Lesfeath, preserved either water 4 from all tastes elighty alsoholic 4 Heavour as if fermentes by everything my expense " which leaves but little to add isoft that the result of the experiment cofar apparent f conclusively chows there comething in ch. What explains the formentation of will know letter than I I am party answers that you should vous come fish and meat each come grouse fraire Checken some with the feathers on and others with

want this thing follower up and are game to epend \$1000. Let lomelon at it without delay. This I choused thenk could be done without unterference with the greater ook going on as least enough has been accomplished to crow the desirability of patenting the proces which indeed I think you had already decided to do be fore & aft I have kept one peach marked the 9 th august which the about four drope of water in our worthon which It think is awing to the chaking about it has beened and in condequence of its acres rather loosed in the gears. This has been the care with all the fruit which probang explains the water. Ly pasking come in Cotton natting I have been in shore too with tuno tolearn anything of sufficient entact to report enego rate Alubain has apparently been unader to breng nathery to a conclusion till my lettern betterne buseness and looks all hold lettern celes 1 the difficulty of atting a country

Gold & Stock/Telegraph/Company/, . Western Union Building, New York, Seft 11th 1880 Friend Edison. Miss Mini Ofarrius of Coloque Germany, daughter of Profeson Ofarrius, is desirus of obtaining your autograph to place in a collection of celebraties which she has made. If you with Kindly write it, or a note signed by you, I will forward it to her and thereby confer a force which she will greatly appreciate. Jour very tenty with Carda Les B. Prescots alloy but I show

T. A. EDISON,

Menio Park, N. J., Aug. 13, 1880.

Myert Willow
19 74 at

Writin will meet Cal Wortley on Wednesday Dales.

n 415 Sept 13.80

. (A Edison

Will go to Mento tomorrow to see you

S 13 Exton

8 part Kig

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Ments very uncertain nor

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"Alte future." Shine apace long march for you to give a few minutes thought to "albemarle" Four opinion as a dountist will guide me to the 5x lent of Thinsan of doceans Thavent as alvaro from Di Moses, Chemist who promised his gare minent to an tilizer. The Co Gas recently become very

shing away Closer. Jan is define like that and the famero horticulturales setting wied Next week an I duestos arde proposol put up the price 9 Treasury Stock to Imwant to make a fe Thersaud; De rese for you and guarantee you Dear I'm have written youther incloses & melose the Label for the box of we Inneh like a work cleetic Pen - now. Oziginal Lave the please of in Teleph Thin Jorna

Hotnard Worthey

A Coming the Colonia C

Juston Stat 15, 188 Boston. Self 15-1410 mend Edwar Deen In-Bustin Celebrate, ets 250 annum Traces of the wek = I am festion mile from Boston-Beken formely of it forms however muching monufaction - The Imming as Louis leating my helpest he Come he my little and unted me to ame his mulitary to fin which I enclose - his farm has Cust a million dollars and is a peet light - for

Into Which him crasy by healthy and Seem frime In Thoule and his place I hope for ine our and May a few days trong from from the find me smith will be it she defet to must fon . I have but a minute to unte lefore Litzing my trans de seeme benty and bush-The Gorenor of the State of men and many Chejinstans on to be day I that for world Enjoy it also me Edwari Respectfully has

T. A. EDISON,

Menlo Park, N. J., Sept. 15 1880.

Col Stuart Worthey

Earles Hatel

My

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Colison

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S. Bergmann Les 106 Wooder St. New York.

Oblige me by letting bolonel Stuart Wortley have two motographie . telephones of the finest pattern and style of ornementation

PS . He desvies them for exhibition at whe South Kensington Museum London

My Supt or or Worting In addition in the double exercise Earles Hell
Jeff 22

My chardor many thank for put

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J.W. HVATT.
VEWARK.N.J.
LE VETEL JOTTY but many the (The acclination of interid laking a day of ricreation. Ludday or Wednesday next We engrifed the Cyclop a first day ocean trig, The purpose & will probably go up the Hudson, or the Lound We shall number with our friends, from 50 60 100. and me should be par licularly glad to have you go with us. "All work & noplay or" Please favor me with a reply. Will let you know him and place of starting from servants,

Hancock and English.

New Hersey Democratic State Central Committee.

Clarme King, Seried Mith the Cyunt that Copins he forward with the Character of the Comment of the Clarme King Seried is the Clarme King Seried in the Clarme King Seried in the Clarme King Seried in the Clarme King, Seried with the Cyunt that Clarme King, Seried with the Cyunt that Copins he forwarded is Clarme King, Seried with the Cyunt that Copins he forwarded to present that the Character of the copins he forwarded to present that Copins he forwarded to present day, he can be a more down, I wish the King that the Character of the copins he forwarded to present that Copins he forwarded to present that Copins he forwarded to present that the Copins he forwarded to present the Character of the copins of the company of the Copins of the court of the copins of th

1.1.00, 26 36 980. Our atte office has been unanged for House lay The 24th inch ria the 7.35 all train from Broad Il-+ boat "Robt. Robinson at Jerry slife Jusey City" which is chartered to take us to the "Cold spring House", Coul spring Harbor L. S. where dinner to will be lagirly awaiting us - Should the wearter expear too this tinuis woole will be taken at the Broad st Station before Starting. You are at likely to bring a frient along Orlando Greacue) Committe To Port J. A Edison UB Edson Menlo Park 1.5. Phone statt by stat your acception that we may kin number , ring _ and also state time of your arrival in Jusey City-+ Str. will call for you at the Penna R.R. Slip to some com your Jun Tuly of between 8 + 8:30 auch Jun Tuly of UBaken

Spraof Back VILL Ja. Edusin Meulo Pork M. 7 Buichin St. N. V. Deac Enclosed. please find first finder hiroz- of Skelch for On minerican Portant Jold · It just makes two fingers - although a line or two might be added of needed et is marked out the quatter to the pauce extert could be substituted .- I however It is right - telegraph to that iffert and it may save me ado, (Oct. 2 '80) Theo Ruskas Ruskas GioLaportas 2 Nassau St pton gone away LRC

T. A. EDISON,

Menio Park, N. J., Oer 6 1880.

St. Graffin Drevel Morgan C 23 Trace Ir My Olean brung Bank Book

7 Cc Edwar

Nysetives Walnoffeet of Water

Tributoffere, 24, Och/2. They Dear Sdison :-Very sony you did not Come to death sories, pe on all had a first arte time. When: em you can see ou con ahead, at me turn, a 21 shall be most glas A Don you Leato, - or retain them for you at the basseffice I feet ander very great alligations face i my audience. El. Johnson says yo han grow chestunting at there . of The can have a fair shen al that sort of fame me would like exceedings to me and

Sheeting or back, - provide the there is a convincent trace both map on the godly day.

Will by plane and John a note of advice a the valge of abolituments of about the form a some of abolituments of abolituments of a confirmation of a confirmation of a confirmation of the a confirmation of the a confirmation of the confirma

2. newyork Oat 13 Ma. Edina Park of Edison is at home or It is citizely Convenient my Lourney of wine go ais this lefternoon + should night auswer De Lowney of Plowney Brillians Myork. entirales Couvericani be glad to tee Edison

Thosa Eason Delf and wife will be at your place between Pon Maguel

EXECUTIVE OFFICES

→*/HLBEMARLE FERHILIZER COMPANY,* l se cedar syreet. New York. Oct 14 188 My dear Edison; I want loses agm about a matter of Onsinees wanted with This Co. involving an immenes fortune that can be obtained by you and one jointly, I would & to Mento about it but the true State of affairs can only be Quen here. Write you Therefore Come to Newyork an Jahreday? I know your aversion to Coming to town but this is matter of great moment as you will quickly are when you leave

the facts and I assure you you will not regret it. I have

buy just returned from en property and it is the structured of received up there, (Much me bourgely) that causes me to seek this conference. This is a freater they than the "highs."

and I repeat you will such freque coming here.

Agter on business talk of a greable, I would like you to some with me at my ach house and then go to the the theatre with me to see lindouly or whatens play you like.

Please aur, any dear Wrong drink let you work autenfare, has come. Telegraph me in receips of this, as I want to lelegraph to me hopermendent at the property (350 miles from hors) to Come down, so was he may meet as

the necessary data. This is an opportunity that occurs once in a life time Alone Jam Entarth your aid, we ca Inbatantially ours, Teense Therefore Come and alignaphine on receipt of this the time

Patent Office Museum,
South Kensington,
London, S.W.
Oct. 16, 1880.

Dear Mr. Lack.

I have the honor to report to you my return from my sea voyage.

I beg you will thank the Master of the Holls, and accept my thanks yourself for the favour accorded me, and which has in the Doctor's opinion resulted in much benefit to my health.

You will remember that I wrote to you from Sydney telling you it was my wish if possible to return by way of the United States as I felt it to be my duty if possible to visit Washington, and obtain as much information as possible both as to the Patent Museum there as well as with regard to the general working of the United States Patent Laws.

I was received there with great courtesy by the Commissioner of Patents, and was allowed to visit and sit in each of the Examiner's rooms in turn and by watching the mode of examination &c.&c. to make myself thoroughly acquainted with the working of the Patent Laws. Should you wish it, I will make you a special report of my views on the American Patent Laws.

I deemed it also my duty while in America to try and obtain some models of value, and such as would tend to increase the importance of the collection belonging to the Commissioners of Patents. To this end I spent two aftermoons with Mr. Edison the eminent electrician and am glad to report his presentation of some very valuable <u>original</u> models of his various inventions.



I forward herewith a list of the various models of interest I was able to obtain for the Mussum during my visit to the United States.

I may mention also that while at San Francisco I visited the Mechanical Institute to which I was aware you had sent a complete set of specifications &c. in order to see if they were accessible to the public and freely used.

They are very easily accessible, are taken great care of, and are very much used - all which I saw by going in as a stranger before mentioning my name.

I shall hope the Master of the Rolls will visit the Museum soon and see these new acquisitions, those given by Mr. Edison being of great interest.

I am, dear Mr. Lack,

Very faithfully yours,
H.STUART WORTLEY.

June com

List of Exhibits brought by Col. Wortley from the United . States in 1880.

Oct.19, 1880.

List of Models &c. brought from the United States by Colonel Stuart Wortley, and of some that are being prepared and are to follow:-

Original Electric Pen invented by Edison

Original Phonograph " "

Original Telephone " "

Original Tasimeter " "

Improved " " " and used by him at the Transit of Venus.

Original constant printing Telegraph Instrument by Edison.

Original Electric Lamp, of the kind which is to be the

Electric Light of the future.

Patent Lantern constructed to burn in the open air and used by the U.S. Light House board to light the shores of the navigable rivers.

Patent Bell Buoy to ring a bell with the very slightest motion of the waves, adopted on Coasts by the United States Government.

Sectional models of the well known Patent Magazine Rifles for joining 16 or more shots without reloading -

The Winchester The Hodgkiss The Remington .

One of the latest improved Patent Type writing machines.

Two Patent Revolving Bookstands. (These are of full size and will be used in our Library).

_Patent

Patent small letter weighing machine - as used in the United States Post offices.

The Eagle Automatic Pencil.

Patent book for holding newspapers &c:

The above are all patented here as well as America -Besides the above which I collected and brought with me, others are to follow which I will duly report on when they arrive.

(Sgd.) H.STUART WORTLEY.



VALUABLE MODELS. PLEASE HANDLE CAREFULLY.

On Her Majesty's Service.

Colonel STUART WORTLEY,

THE PATENT MUSEUM,

South Kensington,

LONDON.

(Form No. 18 B.)

words.

16 BROAD STREET, NEW YORK

THE DIRECT U.S. CABLE CO., Limited.

In connection with the Atlantic & Pacific and Franklin Telegraph
Companies in the United States, and the Dominion Telegraph
Company in Canada.

REGISTRATION OF CABLE ADDRESSES.

Be Shomas Alva Edison Esq.
We beg to inform you that you will receive Telegrams by this Company's Cable from Source of Egg. I Dridon under the registered adalyses of "Moride" Membrank and in cabling to this firm please address pour telegrams to strate of "Moride" London As the above Reversible Register identifies the sender, the signature becomes superfluence, and the

cost of the address is reduced to the rate of two

Very respectfully,

We mfor

EXECUTIVE OFFICES

»«/Пывемякые Fertilizer Сомряну,»«

AND SE CHIDAN STREET,

SPECIFICATIONS, L. FOX. SECURIAN,

N. JACHE, TRALE.

N. JACHE, TRALE.

hlear Mr. Evision

a letter five days ago, wanting to see you am

mutual interest but have received no reply.

bedyn pecure the letter ? Since writing I

have made arrangements for purky the undertaking to which I referred band amed the he of much importance for meto see you in New York.

for me to see you in the here. Within a sew-days? If you

and are try and golo Meula Couri de Fr Tardrom Ey meneo Park n.J.

he writes me to know what be can count upon, so that 3909 Locust-Di Philadelphia Oct. 29 in case you can do notting for him, he can provide lome my dear Edison: other novelly of you can give You may remember him the lamps, I hope you that when I was in hunlo will go over beforehand and Park the last of July, & spoke to you about purnishing, enough be the room and suggest the best plan for lighting it. He of your lamps to Dr. Draper to has there a 4 H.P. gas engine, a bramme machine and a West. enable from to light up his new laboratory, on the occasion on machine. Her is coming over of a reception which he gives here tomorrow to spend the Imto the National academy of day with me, to see how my Tources, in new York on the new I HP gas engine runs my 14th of November, & understood Gramme machine. I lease teteyou to day that you would graph me some time tomorrow have a plenty of lampe by What you can do for him. By the way, why can't you that time and that you Come over tomorrow (Saturday,) would fix him up in good Chape the the time of the afternoon and spend Limday, meeting is now approaching with us son would be interested

to see what my brange now really a remarkable thing. I 'chine would do . Then I have am now making one of his cea levoy Crooker tubes which levening cells and if it works I am going to chow, which are well, I intend to blow it al-Dr. very fine. Then too dawyer is Praper's on the 17th, hr. Bell talk running his lighter down town ed to me in Boston across the hightings up the mircantite dei-Equare on a beam of emlight; brary building. This I know and the articulation was very you would like to see. The good. We cannot see now that Thomson-Houston dynamo-mait can have as eftended applidune is running near here; cations as the telephone; but that and they, say that that is the is a matter for the future, best machine yet; of course al-What progress are you making ways escepting your own, Come at hunlo " I espected that you and spend the sunday queetty would make that grand demonat my house and we three will stration before this time. Have have a good time cornelion; of you received yet the high speed you can brug mre didison along ingine from here? I see you so much the better how. Barker are forming companies in Quewill be very glad to see her, rope, so & suppose things are yet I have been efperimenting with marching on. Braham Bell's photophone. Et is Yours truly George J. Barker.

Show Frager Learning town Oct 31.1871. To I a Colison bry I hegto weknow ledge the very a town of the end of that mo a Syone at the British to De Binninghown Literary - octomia or the color sim it - no

aheady taken or agreem)

peter / your Experim)

they your very usper

Thomas T.

a.R. Burbank

Lottes Clu

3909 Locust It Phila. Nov. 9, 1880 found your letegram here on my return from hen Votto Emday night. Pam corry you refuse to allow draper a few of your lamps to chow at his reception. He is a good fellow and & feel hurt mythis way, to far as he is concertied, the reception will not enffir. He has leveral other things to show which will be very interesting. and as 6 lamps, he has been offered lone of maximo, which being ow resistance (30 ohme) will be easily our by his engine. Sorry yours

Brothyn How 16/81 have slaughtered me after a server of 18 years. In at present insimployed now but respectable.

for me and manifish in desire to assist as you a fainally visit

J. A. Edison Eng Working My I endow a hori of the regular subject one. Mi will esteen Jana if you will concert to ! He here some weing and to take put by opening the discussion. It in can do de ville you designele viel Fitte by which I came Le it in the next isome of the purguemen while oblige Chary hand from Status O.S. I would about his you down he see 16 the Complex has just the me he will have

Em Suf de l EXECUTIVE OFFICES

→*/Albemarle Ferthizer Company,* SE GEDAE STREET.

LIMENT SPECIESS, FINANDA BURNS M. PON, SPENITARI HANCIS W. JACOUSS, THEOR.

Dear Edison I worke you a week ago in reference to the five shares of Ore milling munich I paid you \$200 but have received no reply I know you are 5x tremely occupied with things Electrical (not to speak of things histronice in re the Drivine Revalands) and male matters go unioticed but many is aurque precious To me pist now. Istarted out to raise \$ 10000 by the 7th of blesember and I am within speaking orstance of leas hand some sum End Eng.

Jouen that is raisable, In making Herenlean efforts to raise for unless the whole amount is forthcoming on the appoint day, I lose an option that means a firture. In therefore you and let me have the 200 # it would be not an in ansederable belf. As for the 5 thanks of Oh. Iwile take it or not post anym denne by thee 1st glannary as then I Thate are in large funds allemante so booming Thursands of lows weber fold lind the stock is Eatist increasing in value Please let sur bear from you by return mark Justmey & San. Ta

THE WESTERN WHON TELEGRAPH COMPANY.

THE WESTERN WHON TELEGRAPH COMPANY.

THE WESTERN WHO I A REPORT THE WESTERN WHO I WE WIND WHO I WIND WHO I WE WIND WHO

Biank No. 1.		
THE WESTERN UNION	TELEGRAPH COM	PANY.
This Company TRANSBURY and DELIVERS messages only or coedition, limiting its liability, which have been assented to my the sender of the polarizing message. By the control between the control of the companion		
This message is an UNREPEATED BESSA, the collisies mined above. A. R. BREWER, Sec. y.	GE and is delivered by request of the NORVIN GREEN, P	
Dated Newforth	Diches	188 //
Received at MENLO PARK N./		
J. J. a. Edise	· · ·	
yes 7.	the ocle well, ABC,	ek.
B) G DH.		

Hanter Dec 1.80 House. C/o Hant Mon 80BL

Kind case to remit the small balance - I due me which is \$ 3.32, ras I have been muching large forch was mind care pu med of fourtes. I force forceties a large additionery . Low Flisher and his alsay wint is I believe, the best Enterwitogicas Library in the United Starters With this rimarks Dimein

I'am aware that : your characteristic modesty will not permit you to speak of and for yourself, in tach I could see no occasion for if you did, for your notes fresh orffice the four for you without that, but will you allow me to beg a small Jan of you nearthely? ! While traveling in Europe and Thoroing the thonograph, I found That the most interesting part of my entertainments were the short biggrapolical obstatus of the inventor. The material nos rother

meagre tis true but acceptable still

now I find in this my new on a subject which interests the " me ("The dunny chath",) that whole circlized rended Chr Edison is handly as well May I count upon your hind Terrown as he was in France for your trumpth in received, and Germany while Itraveled There and as I am about propaging a lecture on Edward x his inventions, I presume upon the venture to ork you whether you could not without occapacing your time or conse CKB. I see by the propers that nience, points me to some printed you propose by an appetition sketch Jyour life from which of your perfection light own, to cull some whoble data in Wish I could from another the subjects everies, at Mento as happy as Of you will is for favor me, the one & speak there on Seen 31 look. you may not arrived of my most lesting grotelade and ence at the owne time contri. Addrefo J. J. Sprenger Rome Ga bute in a great measure, to

the information of the people of This rection of our tenion

Star Ta. I beyon my testumy in lessfine care body, I send seems your or any other and seems your or any other for any one of some of some things to be your should be the grant of the form the seems of the form of the form

Auffalo, Ny Dec 11 % My dear Brosesson -Dare I make an appeal to you for assistance, or is There a spot in your memory Sufficiently green to call up any recollection of the subscriber If all Thear is true you Rave reached the top of the ladder financially as well as dientifically, While I. the least dignificant of the Exeter place Channey of Soston tris, am still working lifteen hours aday trying to pay debts Contracted When I squandered and

lask of you, my Quandam friend, is to read this thro patiently & favor me with a reply and if you will lend the once more a Kelping hand Iwill try by future actions to show you that I have dome appreciation of Kindnesses Shown me have been working here in Suffalo for the past four years and devoting about One third of my incom The payment of sed debts. Thave in the meantine, with my usual good management run bekend There and now when

have probably the only Opportunity Dever well have to better myself Deant get away from here because of this being behind -Thave an opportunity To go to traskington at a salary of over 1100 permonth and need 1/00 - To make the Change In the past four years & Will you repeat the Kindley My wife has had pleurisy. you did me ten years ago Apreumonia Every winter Cwould like to go to Washn with probably a better prospect of repayment, and loan me #100. for as a matter of health as well as wealth, but Cant five ordix months? make the move for Causes Keclimate here has Mentioned above worn so pounds off of me Will you help me dom? If yes drop me a line, If no, put this letter in the fire Young nothing about it Iwould like to go in two weeks xif you will do anything for me will go the your place. It explain what my prospects

The position I can get in Washington is one to be Neated by Charlie Cottreel On the Cinemnati Gazette Mivate wire - Jenelose Rots letter which please return Jours truly John Eclarke WW Tel Co. Duffalo ny

mice go and by I Four thirty train -Cam you have a a Camay for mis Lowey at Station better 17 DH It ill have carriage Ny Dec 14. 1880 W Frank Rev Bee 15-18

UNIVERSITY CLUB.

Sear Million, 1850.

Dear Million, 1800.

Again in this Host of the North of the North of the Great the Mark of the Great West Where I hasking your acquaintainer in 1875. I perform taking form in the Course

I show sailing for When I was last Continent. Noved it be Thurs Day? - + Beau y your W. Frasis Ral

Portor, Lowrey, Goren & Stone. . Attermys & Evansellers ,at Law. No 3 Broad St. New York. P. O. Box 1836 My dear Mr. Juffin Rease send us as soon as possible the original rentricates of neconforation of the Edison Delephone Company of Eviope language with the Randoch Steway.

Portor, Lowrey, Goron & Stene. . Attorneys & Counsellors at Law . No. 3 Broad St. New York. Lengt 180 Dan my. Simb wearly a week may 14. don want. Sent them

one day with you and had the pleasure of riding on your Rail road, I wite this to find out what You have done and whether you have made the trial you spoke of for the Tenn Central Co. So will you let me know what your Motor will do in the way of hauting freight, also if you have any apparatus or machine for dry Place ground. I have plenty of ground that pays 30 cts to the yard but as water many than Ho miles " You spotte of making a machine for this purpose, = Haso you dow so He have thursands of a cons of good paying ground but no water, I hope I am not asking too much for reply with his regards to In Loughtin Jamain dear Six Richerville Very Refuelfully Chas abide

6. Lomburd Street & Co J. A. Edwar hag, breve Park New procy asa. Megaphone Pray, Pray, Pray, have this shipped without delay ! as kindly offened and add to the many obligations, - fin yours Lincerely ..

ephone shipped Wege & Long

THE WESTERN UNION TELEGRAPH COMPANY.

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Portor Lowrey Soran & Stoni · Atterneys & Configellors, it Line P. 0. Box 1836. My dear Edison I wish you his year a help, Ser Vear", + great increase In restel to the finance ty gratish on yoke to Fabri + me, do sull be frovided for & Twombly wished h hoving (so he He Units I's an chonce you in love on Asters come se infe at the Victoria Hold co

2 plan gone hade on my admic to her hom gone to the at thouse Inf the necessary to be in town 1 denly moto get a other flace now

Tany to Mexico Friduck Boardsfee City mexico How is Laura gettin

V.F,BUTLER, .x0,1, MERCADERES ... HABAWA

Thomas & Edison, newlo -My diar Edison, ... Ismed you some gas areuments by mail, also enclosed some notes from the similaries of with companies which Shope may interest you, The earthquike as you may pireum has spared me, no doubt with the object of sursting Jon; - The Herels heirent is the quintist humber + leaggestion Ju Cur magin, in Habana we experienced Three or four Shocks but sleight, however in Vuilta Abajo the Shocks were suppresently hony to Shike down some houses, Padre Vines our Great Natural Philosopher here truces it to Jublana Connecim between Cuba + Central America -I much a very interesting person who made an eccusion in your favorite Wo Columbia up the "Atrito" remained Senin months, at Initildo & hovita, Kreitunia with Horor of Gold & Plating he calculates his plating at about \$20, per la he was 45-days going up the river 4 6 days return. he describes the Country as the worst in the

world Chinate homble raisin tonents long day from Malaria. I the dince jumple fall of lamp wild heart romake that is every to wan the Compay one back swamps so that it is really a Land withint any land - Population Nignes x Indians, no Whites - nous fall of gold, which the natives only look for When they regime to penchase for dive there is no ford produced or domestic annuals, the annuals at Novita here and doubley & fine fouls the fouls were habied at one ownie gold lather. The donkey was purchased at 35 innies . Vasted my faced Who is an officer in the doing & and le recolutionist to with mi a skelde of his trip if he does so I shall Sind for a lopy ... Shife your dear baby The hight Somewil is getting in well let me Know when you get time - Regards to Batcheles & Literature Janis henishuly 1 Janto 1. Maria Diagrap 45 - Now Joins a & M.

Time Washing to Color of the Arthrond Val & backer 23 Received at H at

MeuloRarko READ THE NOTICE AT THE TOP.

Phila 30 Y prof Barrer meulo on Griday about trolor oduty The prof wants the lights and railway n finet Class order erry I Carnest Come Ra

1 newyork 27. 1 a Edison efferselent me Copy of contract with foreign Countries which I wanted & be Countries Willard 20 nascauds. gesterday 18 boid dr. 2 new york 27. 10 Edison MIS Care be made trucky aix feet of how wichen Diameter rover 12 Colleck all Machy Eleable to Thomas. Meulo hard Stop Instruent, with clock work ainies much abblish haudle 10 Loudon 4 Ottawn Out 27 Sample is in a Powder Keg forwarded from Montreal & Dural Graid on

1880. Edison, T.A. - Accounts (D-80-005) [not filmed]

This folder contains trial balances and other draft account sheets that were used in entering information into journals and ledgers (see Accounts Series).

1880. Edison, T.A. - Advice (D-80-006)

This folder contains unsolicited correspondence suggesting improvements in Edison's inventions, asking him for advice on technical matters, or requesting his assistance in improving or promoting an invention.

Approximately 10 percent of the documents have been filmed. Most of the documents selected for filming received a significant response by Edison.

take this method, of caller ich fatents were oblamed this of in the mouth of Septem 1879 last They (the air Dink) are provided with a lute lattached to the barrel of the pump they lengthen the barrel really) within the extension is a spring upon the end of which, is a class, for holding a blug - as soon as the air is exhausted from the vessel, the spring is touched and the plug driven into the opening of the refel from It occurred to me that as thousands timellions of globes, for your Electric Light would shortly be required jahed as this process is very simple of almost as "exponent traped as butting in the stapped was butting in the stapped warme it to you, as it must facilitate four operations, why consider corally, as nell as cheepen the mode of this department, of this pay interesting work which you have just given to the world.

If this is of interest, please disposit a line of If this is of convery your can see the operation of it of Branch

m hoter but to

Hotel Windson 12 Castle SI-Boslin January 8 d 1888

Thomas Edson Esqu

been myself an inventor in a small way and not being trouble d with invey or jealous, allow me to compatulate, you whom your successes, which I do most heartite, ome time ago I tried dome experiments in the way of seperating the gastes of which water is composed for the purpose of obforced for the purpose of oblaiming a gas in a check way for heating purposes. I succeeded aliminally, but have

not made it public, because, to introduce duch an invention requires Consider able money to fight Mose who

are always ready to pirate or steal a poor mans invention if it-happens to be valuable My Street in Saying all this is to ask you, Can you produce heat by your inventions by making use of electricity in a very cheap manner? It is of little use for me to try to introcluce my invention is you can Keatly electricity Dery cheap. By my process Square for one cent pr day over the cost of the water, which, in cities will cost-a trifle in the country nothing. I cannot use it for lighting purposes, but for cooking and heating purposes it is simply perfect. I have no ashes, dust or odor, dam

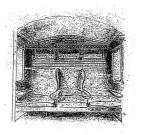
not trying to sell authing to you. Touly want to know what I have to contend with and if you will know mail you will gratify me very much. I be Barrey.

In the present state of Decene we cannot heat houses Economically by Electricity

Santa Paula Ventury a Cala Jarry 6 # 1880 1. O. A. Edward Ments Park Vif. Down Sig Our Tools that I we for Reforming + mathing watches how because Magneting and I wish to rector them, as will love them; Cleans inform me how to restore the dools to their former condition and how to proceed to make a delicate tut so as to tell when the magnetism is all removed. My tools if healed to a red heat are spottled to you see the receiving of not healing their Vary Respectfully Aprill des un lan of Jes L. Spinner how to do it appeared in Wenting 63 the scent fix am California Supplement 200 3 weeks wyo

40: King William Street Allens Jansen Atheren Search In reference & Conversation I would be glas from were por enough to comme the could appeal a practical enerm of statch on back of the The result deservois the lighting up of the under part of the Roching rock which Contain avulisement June land General Caspin solong as the under part of In rack is lit up the light my Al he any of the whole part of whit is the avalament or outside + either en

Tondon Janyle, 80 Branz Jansen





Tancaster James 30 Old attantaine Septething the fiber Refuel too! - I have 3 Throw and witch thinks will answer your Payore. Arnel is your will try say that you will try ist I will have your a Saugh. and will be my min

Deased to here From

41/2 20 8th St. Fef 12.1880 Write 45 ay menell think our cher bolism his viva

decar Si

I have watched inthe great in. tenst the progress and results of your experiment with the Etiotric Light, because if you enceed as I am sure you will - an apportunity will be given to cities to ventitate their sever jipes with down draft ventilation, which I have been advocating the last four years. The practical difficulty, in introducing this system fountile tion and burning up or disinfoling the sever gas in severs, has been the expense of Engines boilers . tall chimneys and other necessary axpurtinances for the proper disposition of this gas. These must be stationed as you propose in various parts of the city to accomplish the effectually The explanation of for air framework over limite are as . Your expline of manufacturing and distributing the blacking Light solves the problem in the most practical way . I see no objection to using your bygines shouler chimney ste.

to primp out this seems gas as fact as evolved and cause it to enter in the draft of the channey moder the grates of the boilers . I findly believe that by foring the forlain to descend the pipe sustend of ascending the same hours drawings will be relieved of the questist sanitary said in the City . I simily you would thank you agreem of sentitletime in commotion with that of the chatre light, of you could harmonings the two that is give cheep light and pumair en our devellings you would be touly the quaters being alor of the present sign. The left of mental and animal news. owing to diescape of seringes with houses and threetde oreas immensely the productive before and power of the people. Surote in 1846 to Wallace yle ansonia Com. about their startine light whether stand be used to dirainful seems. They applied that they and not subdivide their light advantagementy, My object was to find out whether this dirimpolion could be a complished by means of electorical wives extending though the whole system of account age and of having light burning it will or continuously withthe pipes or wells commented with them at internale sother the surryers into ascent weed he forced to fare through a bank or bettery of plane. Perhaps you can do this with your light. I amoun

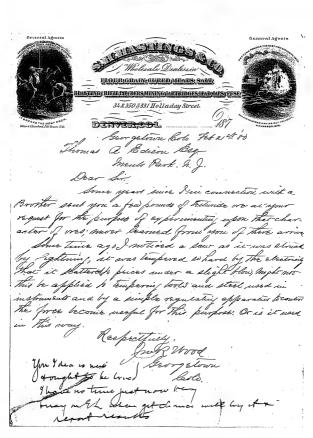
enter time and me and since 1876 without adapter setum, apon the britishin and direct forting of severed and their appearances. It does seem to be as if you have opened the pay, in a destrely, to accomplish a great sandaring result, which of make known public. If would add to the desermed popularity of your black light eyetem.

I have taken the liberty to wink to you became of any interested in sandary metters, and have find appearing from may have just adver metal of principage appeared any time to think about it.

Journ Tooley M. F. Maller Mile Ro. 8th.

M. J. M. Maller Mile Ro. 8th.

Plant Tooley M. J. Maller Shiele.



Thos A Edison Dan di Last summer I make a wilds Dynamo Chatie machino, Which worked very well but not knowing much about Electrical scenew at the time, I muse it too small to produce much of a light But being successful in it. I secolord to make a lunger machino, and your .) reputation for a successful ... Chetritian is world wide, I thought I would copy apar you, I saw in the Scientific American illustrated discription of your latest machine and as it looked very simple and had your name to back it. I concluded to take the liberty of making my large muchin after your. polition as discontrade Right him let me my that I have make the machine for my own amusmut and do not expect to sele or him it. nor do I expect to interper in any way with your rights or interests - luce I would my material which consisted of I wought wow over 5 in Dian, and 26 in long one cast cross piece 4 x v in long to connect. top of magnets and 2 cast iron poles with a how bin in diaming the armount to revolve in 50 4 no 72 win to make the believe, my som made as described in beautific amortismo

I wraped it with no 18 wine (copper) the hight being thing only from commutator around amount, but to commutator and them soldend, The wine was laid an true and consistion of 10 strange of ely wins Ench - Iron this no effect whitever, although my may note actual magnificently; After this I took off the were and put on more of the same sign but comproved only of 6 wines which I carried around the armation 4 times befor factining to commutation have then were connected up so that the hard wen atternately Position and Desgation, This fam no better ments other the other, how I compare that I am stamped (to use a westimisms) and do not Know what the shoul is the mater, nor where to look for it. I do not think it is in the magneto as they sum to work will and the armation sums to Juspice all the conductions 20. " Cut the lines of magnetic force in a line purpulantes to its direction" I had given up all nopis when a found of min suggestive my writing to you a stationer of my case which I have done as above. but I conquer with my little noper of an answer as I know you are very hury and I suppose totavol with liters like this on Every day Stile him Edison of you should answer this I will ful placed under many obligation which I may him be in a position to return but if I should

2 your any Resulting. Clay mercia Sparta Lee



ALEX, McDOUGALL, Ciptale, WM. K.; COWING, Clerk, GEORGE FOLEY, Steward

Hale Michigan & Lake Superior Transportation Co.

General Offices, 7d Market St., Ortging.

Superior Dunion.

24

Cliviland March 11th

Dear Sir Edison Mento. Park. N.J.

have nad and hard so would of pour injunous and invention from . That I have concluded to write you a an idea That has vin in my mind for come time I am not able to make the Experients required but doubtless your an july able and four good programs on even will soon the of it is worth any thing or not. For an amoun you preate need of a Mariners Compan that will in proof against all Local atraction. As me know the atemphin is almost any time is a Conductor of Majoritime. I There is a Compais midle or majort was in some way placed in a place girle or other band with the air Exhauted in many a project bacumen was obtained. That The much would still retain to attraction the North and South, and This Vacuum would amount a non-conductor of Magnetism or doeal attraction and in This gin us a Compass that will point true on all Ships is and other plans when the attraction is so reste

127. River et Reputfully Your! Climbank Aly M. Dougall

784 1888

Sparta, Ill. med 20 Thos A Edison Dear Ling of 16 courts for which I notern you my sincere thanks. I am. . mon than pleaned with your Kind mer, and the cleaning of orcangem and diagrams, I think I understand It July, the trouble with me before was, that I was working with pains to Kup it so. I go to work that truing and when I make a series I will report to your and now her Edison if ever you and any information or similar down in Routhin Illinois let me Know and I will altered to it as promptly as you did. to my englines we have the

most Reports Clay mesici San Fran mar reges
J. Frankert
aape \$3

I am surprised that you did not receive my rigistered letter as I have the portal receipt with the sig At your request Suprating proposition: "Knowing that Gas Companies are troubled on account of your great invention; an idea suggested to me to make we of the gas as ful. I discovered that sheap gas may be manufactured by means of steam heated with a cheap combustible

material in the hot retorter; by this process the gas will be very hydrogenous and consequent by afford more heat than the gas used for lighting. I would like to obtain a patent on my discovery and introduce it through your influence, therefore Sinvite you to take a half interest in this business; If this project will find favor with you please process a patient immediately Be so kind as to inform me at an early date of your decide ion and address all comme. mentions to Nº 1403 Scott St. I have the honor to be very respectfully Fir. himist and Asayu.

Milwantee Mis construction of the Street Cong word has word depart word depart the street of the str

Mr. Thomas h. Edson;
Sen Jir,

be Rind enough to answer

The following guestions?

What oned case would enclose
a I have power torack blothe motor?

What sujed case would enclose a 2

home power tradic blethic motor?

What per cent of the power

generated, cour be conducted
over I mile of wire and

uthings I ma Forache Motor?

Your Respetfully

Ohes, Whatteker

Melwanter, Wiccomin

Nichmond Ind 4/6 The A Maison Menloe Tark Dear Sin Permit me to ask a favour from you if m your four to communicate "of will place me under lacting Migation I want a receipt for the fore proof adhesive coment. in My experiments so for I have failed to get it hence my application to your self for kently in that lin Was my enggestion in the matter of electric light paper of any

Hofney to hear from you at your wiling commence I remain Mour Fyriend

FRANK D. HATFIELD,

REPRESENTING

... COLGATE & COMPANY,

Perfumers and Soap Manufacturers, New York.

Answer to Dated, Dated, J. J. Spin 741850
Answer to Day J. J. Spin 141850
Thomas of Edian Ey , M. h. h. M.
- Mento Park, ch. f.
Den Sin:
Lane a simple from a
ask of Ju and forward to and if without apology or explanation thereing nothing but to common on to go buy more air yourself
believing nothing but to burner me to on busy more call yourself
as to it is writing (crease near to think as stone sudened a requesty to him.
Elean imporm me byrack of their
on oh a which issure who substitute on matricely not of which in
tormuly on right of must be make, is he much absolute our perfect
now conductored of Sound you down of . I have not slight over to have out
of the same son allthe dell of the
of the in 18 year are my abolist to select at all turns ofor quickers of by personnings. It has overland to me that might be four statement apportunit to leave in to deep min
mories, that weed for or in on an Dowing it would that from my being - of less
partially - the distiniting source which ving me sheet . If them be a perfect.
non undustry available for the ever mentioned this sugaring well of comme type
if to for it once an above cony Enfeltier from sense of humanity their

a Rubber hipople closedad Balh Ends Athong 9 Known Confidentil

Confi

Exture my his pareing upon your vary valuable lime. I mely ask to nime his of gons oriens thought. Place give it to me. I have discorned a new of. Ilicahing your valo dinded alutric aromand current. It has nothing to do with the production of light. But meets a cless and go universal as that for light. I've smally of clerking headed in the application of the current to the new being for his them that required to per disch it will be so for his desso or person to the consumer. It difficulties to consumer to the consumer. It difficulties to consumer to the selection of the selection of the selection of the selection of the selection. The fact of a subdividual of the new affection. The fact of a subdividual of

electore current is all that is needed. Indeed the orfficulties in producing a continuous light are exactly the heaves That vecuse the utility of the current in the new application of it. and I am quite persuaded that this new of. plusalin of the current will be as val. wable pecunially as hat upon which you are now Laboring . While I am equally Sure Mal cines alin Stronghout all ils ramifications will be certainly as much benefitted by my descrivery as if you had solved your part offer problem in the production of light. ... hav a single word more and I will not his pass in your line if I were sure this leker would reach your eyes before il was read by any hody also, I would not here tale to explain the maller to you here and now, because I have perfeel fouth myon, But a man in your

position must of encecial various of he himself with pecketts a nitpost to be protected from the almost incuminable valenceptions that afflict him in the from g just such beliers as this

If then for you will trop one a line jung me legal resurrance that I may be an equilibrate where in the property of the new application of your work, and I shall be entirely content, the year to prohise, I will sortiam it to you and you can then decide no to its value of granamile not to consume a sheet of producing in electroping the idea It is so place must so complete that you said to able to see it in a moment.

I am a clergy man of the Fro listant Efis capal Church. and can give you any work both in ken york at at in the South: answer at

Columbus This ages. so Re Wallungori your convenience and address Rev Win Mung ord . Rector St Paul's Church. City of Columbia. I have been having here about sie weeks and here it was that I have been unting.
I have been unting.
I will fully Millettors. I stimbled upon the idea of which P.S. Isad quantity of electricity required uned be less, the intens required world be same

Dear Sir. Will you 1 33 oto lbs fr mins 9 Hubert

I will be peen that a river small bolls toould possess a river frigh stammer power (and in proportion as the vary of Locker may be decreased its ability to protein preserve is increased this proportionally higher preserve stems with its scower with the scower is higher Wire it possible for one to present it a glanes to your The highest lisults would however be oblained with a senerator not a boiler what wish to present I am swe lo hat the ceneralise is is pursued over but will be from fun toward in taken in fame you would feel a deep interest in The Same is their nothing of us much Quite a made size generator would furnish turned horse blem importance to the universal use and duces Singme und at any pressure as des ne of of the Electric light other things being quat Super heat in the Steam desired Took as that I wish to occure for a minute of two more degrees Dufir-heat involving as your altention to in the Communication and a matter of Course an Engine not effected injuriously by it and this is I would not trouble you knowing how fully proposed we a puriof the plan you are engaged all the time were not not a plunger pirton lingme but a clouble acting verticular horizontes sever as to what I shall state as briefly as engine and entirely free from any providely of mying from the Steam or where it desirable to use it the good possible. If my be when I write power Do much having been claimed for wonder ful in gelling for rothing and from nothing good Probablic highly heated theins as a feeling of repulsion an inventor myself .

can realize in my own experience how this may be A Reginerator sut will give all and your all the list usullo of the Regentute Could you be assured that stem by any Dimple means could be made to do the work and be ulmost universalle applied in. cultition to which an effection for wining it is Cupable of doing rather fuel The mals Compart Aleum Motoro to pleut Curs or Briler or generator divable and reliable the Engine also their Jane Dure you could 4 A After west to which the present from of red fail of a class interest in it - it where Steam Engineer is out applicable 112 5 paints of Coal are now rised 1 pound . However much the bese of the would do the same work, well . " trust I Conter luces wen i Situate only I tento Can Do What were judging solely on this The week of the regular sizes they will mails of the plan would grant the claim always remain perfectly clean however just made, - Only to a very radical Corrosive or Dooty or dish the fuel mus Change in the generaline Copparation, also in be end may be Rept of a very high heat The Engine so that gratly higher pressure through a long take of the small love stated and heat muy be carried, I propose such a much to but I fact of tube thir face a Change Decrome all the Conditions of - would do the work of Siet fuch of the legular perfect combustion of the fuel, fuel tube, - The statements just mude I am any keine coal, local, pravis hup covere look i reconauge and impractable as and not so de heat need to last dul are true and will be fully admitted About I have the pleasure of heaving your up the Printe stack _ It in not a

Cambridge Mass May 17,80 Rev By Hackins May 18

Cambrian, Supaciones

Professor Edison:

The We would of Saturday last amounted that you are sugaped in adapting the electric light to there have been to get the superior of the successful successf

I feared that you were too buy to eath sich this The orear by morpelling It has been in my mend to write you before May Prive Minch The insultion with in I the Social Se. Convention Sajuy, The fearure of the sounds the referres to it in his al. to be The weard probable dont

muscep, - Though I may as will say here that I am a clergyman a have risisted him dine 1802.

The object of this not, however, is cort to many you off the grower as belonging to the Services to me. Dut to very that I should radou your services in hupping to bring the invention to perfection, and would be disposed to enter enter any equitable excorpenents give you are interest in the profit. I have spend services to make the profit. I have spend services a service of the inventions of the inventions of the inventions of the services when you the services were of the services when you want of the mans, which, though recent

Dear Sir. Immed ask your attend headed hun Invention in Scientific an interior and allow think pill phing you in poor to the freeman of the trade in the the plan of which it is part for folly in a letter. They are some forly to by the C. P. R. and I shall be fit It the you pefects for Liginer

Software, hith Low lood and offer for his seen from and out of the forthe for the bold there to let there as from on when friend how has true to letter the lifeties of forthe land, then is and high land have to week for this family Since I affect to you as an of the lond you intend himding and that that the inventor of and he still pay fright bether this makine is an inventor map. In a found of affected for of my man putting as for you pull amount to a good as bruchinery for and has movided and be the meints of ding through his kinesting fortune a choritable ach tome I a holle for many. He is a from more and inventor. When mentioned to pull out in your and although from that I intend a feing of the test or for as inventible in upon this affirm, they Straped he have you chilely for basines and find I would find that all article of that. I have a lady and fishness again to among from have too is til him in a feering town so sail as any other close your and police I per of your an exemption, but I that them Extract priling the idea I begged to differ, for any secured to me to allow you that part print of felff to a likely of him tilled has and prompted to be found

Marke E Shay a June 1, 90 a June 1, 90

This town a young main who claims to have made a wonderful discovery of some motive power to any kind of machine that is run by steam and he says, at less expense than has ever

been done before he id viny ancione to some one hashis capital and heavy
he will convince them in away little lime that
he can do what he say now they is a maximist
at the linger mfs. Co.
who is trying very hards
to get him to work inthe
Inpo flown to work in the
from him what he have
but I am acquainta
with him and would
like to have you see
him and talk with him
at mento past for if

" Elizabenti ng July re. 80 Holeto trave he can do roos you think it of while to give Evening an tring him 134 Jeffersonary Ehgateth

am to address the County agricultural Tociety on its I intend to make comparisons between its early days. its present, and future. From the vast stride made in the use of electric ity in practical inspulsions, within a few opens. I am so guine mough to believe that in a not distant future. the farmer, by its means, will plow, till, seap, prepare and take to market the products of his soil Having taken great interest in your wonderful inventive geneus and scientific attainments. I am induced to appeal to agour as the best duthority to know your opinion on the subject and if I am to be considered too sanguine. I know how valuable your time must be and shall greatly appreciated your kindness in replying Menlo Park

Ganufacturers, 75 77 79 & 81 Quane Street, New York, Ong 3D 1880 Si Monter Daste. W. J. furnitudy in Plastining, I take adding you whather or mits probable, that a frice of window ylan made of a mainly glass made of a mainly exectinity in some manner - to Jercipitale of Alree on the window some) _ by The mindon Looking Glas p.t.0.

I know I nothing electricity, but I should for our jumpone the electric fluid contes be applicated by we otherwise, similar to II Plales Monever you deem & 75 to 81 Dune St Now York . City .

Par Stewn Tries der 15 50 graph of share f. Thomas I Odison Egg Moulo Buk New Jost 6 7 They few lives to you is to ask if to be that for the history of finding here & cannot be found with out the radiotance of wid company I am an that you are the only person of whom an get information, 3 of 6 he had would cook of said be & I little comfer a javor 26 Jone Front Okas

Could not be dried by Elich Memphis and Charleston Railroad. Sunavou mif Station, al Thomas A Baisan Menlo Dar 9 Dear Our The idea strike me that an suvention Cauld be made to dry lumber by electricity, Some dry Rouses for drying lumber! use Steam Some that die for Juneces and I take from or to a days to dry and a Kilm of Junter tharoughly. Now if an invention Could be made to turn on the electric Durient aday the lumber Unibermy Day in DI Roms of not Sooner you see it wanes be more Gaste revailed take well aix wanted Save labor as X torus several men to water a dry Your when himes is drying which the the invention a Speak of Could be affected a Could be turned on Teht to took until dry without any danger Of the Jumber being burn up, It this Coned be know com cotinged & would be a projetable invention Hig money Caned be derived to

Goom the invention Thereo large summent Money invised in drying at lumber Man for something that well any & great, Sheor bewremans dry the invention are merely ideas of though I waned drap then to you as you are a Desentific man a Doned Drahour Righ them into Samuting prostreal abenedicing to the progression agr. Downting that you will forbean with them remarks alf you find them worther Jung any them in your want backet Jan Very Ressey

Mr. Edison to learn if you fromit me to use the glass take in which I drew a . penal draft, to try an experiment with as a transcenter for my kind of a phone for hearing on that I have got wife this week, and if you would let me true for an experiment but not

as to be spring 30 the granite your patent, and of you would like to see a draft of my showe I will sind it you, flear our by return much wester · I can and if success I will let you have the phone to patent, will be greatly obliged for your favor. yourse C. Grand Brand P.O. box 219.



Washing Cheen.

allowed to beide Shope Home gently obliged by your inform perhorning to Britain; I can interested If you take in bread in the subject of - still be glad to describe shorty the more wherey new permantical me to the person I now write is flat the 50 promine to destribe of the gre peaced on the hast of get four lains in fracted in & when it is claimed for best of got for me to see the flag are fisher than the frengo, or models - decessors (as far as these have, ie, thee must be some made public) .-I' looking at your pade to in the more Jen le newspaper settent pasted on the pasted on me of the folias, garages of good forward on the probability of hand manight on the med number of your off amongst the med number of your to fellow with very great wheat of the fact to spain, anything apparating to visial machine has been published, I should feel

1880. Edison, T.A. - Articles (D-80-007)

This folder contains letters requesting Edison to write articles; correspondence relating to articles about Edison or his inventions; and letters from journalists seeking to interview Edison at Menio Park. Included is an article by Edison, "The Success of the Electric Light," published in the October 1880 issue of North American Review.

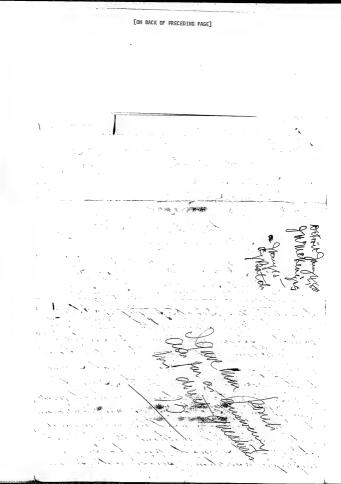
All the documents have been filmed.

Romio: Samuny 2nd 1850 Thomas d Edism & Esean Sir, I forwarded to the ancimute Enjure my report of your new light on Tuesday last and mill sendejon copy if Letme . - h with in any case watch its offermen and let puckun. ' So Shady the Editor his asked me to report

on M. Richard S. Rhode's Audipline, - I calle a today at. Casmell, Hugard L'Co who has the charge of them, but They declined blown one to me tomake midefeedul and reliable tests - The Nohole surrounding and Thin behavior, suggests smushing rorning-In affection it is a rubber Johnnen face, if your house seen me, or can till me the true merits of the nistrunt Iwaned be greatly obliged . Law Vasfelfell John Michels. Cu. of Cincinti Eguin

Blank No. 1. THE WESTERN UNION TELEGRAPH COMPAN un Edison EAD THE NOTICE A te results

Grand Trunk Zailway Company of Canada. Minto Dari Munden al Chre is am sitting a Johny Shomas Office at In Jonation, it is now aim days since my arrival + I still live, The all Elesorbine topic in all cercles har Edison this light as last the blooked Gas Stock holders, I don't ven the Fen penes of the 30 th ult in which appears what is superemented as an interview with me but the fact it was a letter which Sweet to the Editor & which they saw fit to mark interrogatories which would give it the appearance of an interior but the language need by me was a ath, as perinted without the slightes change - if I much any false or improper assertions planer advices me



Grand Trunk Zailway Company of Canada. date Fitch Pensilint of on has very direons great suffering in the last column to your will day is the wor a of Gasions First on hear it would give me a great a phreun if you would withen down to priscribe for him by as him personally or get my tot to uncher your demation of let it he uncher your demation of let it he condulty of does not mich in Detroit, entrollem for and im the answer so it may appear not later than in mit of Sampager, will I have a said for bymal my uple of how secured the Conference of the however of much milestell financial as well as the most successful an energtic business min in the stall

Grand Trunk Unilway Company of Canada. I found an apprecing elim the person of 40r. Butch who relied upon carrying the same parties with him in the same undertake upon the peramise (as he says) of knowing + Tracy Q. Eden that they would sen be got it whom the from cam, after considerable talk to he was told that upon in condition would they (the parties in question) have amothing to do with it makes Mr. Macking advantago actimalista + Greaginged whrupm Gor. B could in I accepted the estration, I expect to have my arrangements complet in a few days Whom I will nother to Dry & som after be followed by a afteration to investigate on there at sunt there your lamps all him lighthe continually since I lift have any of them become dull or failed in any way as intimated by the Entrum have you changed the form of carbon thom - Have you got succeeded in others a carbon of a greater resistance

mistance & if so down it inall you to get an menseed number of lights for St. P of how many could other city In upport to be able to but in your Lystom, In princing an John Cronto ministo in todajo Pribum you might infis that I superior that amouth as give agent, this I wish gom to instractional I confully ainst I have had much troute + anneyone in Consignmen of such statiment behave of Edwin or has which you can span - Has Prof Dentin and in say, son don't get out of patimed with the lone lundings to vanchaufe a high James Briefich Can Virnor Brooks 3 & Congress Detroit

New York, Jun 5- 1881 Th. Edison. My Dean Sin I mus herewith a proof of the day namo article, also the trucing which does not infresent the machine as it is on the block, The Crank while is made Qualler and the machine is changed in sword particulars so chat it - 3

more nearly correct. to the Count as to the article I hope Suhach four truly you will return it at Chro M. Stopkins the Earliest possible moment and on no Jo When will the account delay return ing its longin their miter be ready & show Friday morning. Mr Kichard son is writing up our visit A gown place last night and well un doubted gue gon a good "rend off" of That give him what Jacks I have in regard

one of these days, even if you have not already assained it, the skins share is a good deal of supplicion upon he subject, and Dean Sir. Referring to a paragraph its would stop a good deal of in our hast issue of the fournal adverse criticism and insimushion a copy of which I send you, were the actual facts, as to the cont I have had a sumber of probes Yours Truly. against my assumptions, that the Cholic dight is a success in an economical since. I would be grate sthiged to you if you would give me the data to answer our winter by informing menthe actual amount proven expended in producing the light, and the data upon which I fully believe that economical electric by thising will be achieved

Adjust morning IN Port Office, Unantoning My dear Sin :- After a bestonded wichmung On Ingagament at Micheng down, part towninated, From find myself, to for disengages, of to avail myself of your kind after to Council one with dome encedents in Now life, in which the Horka is now so largely interested of thingon , tou mill do In the laver to name a line when your Myself quatty chiqued . Helien me, Try Dear dir try druly for Mohn Dellaye Indean S. Ediam Invantor 4 Menton Park

WESTERN UNION TELEGRAPH COMPAN ious Davaus is discoveries acel notody the - says public

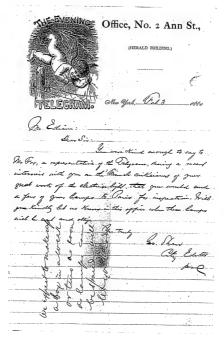
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Dear Mr. Edison,.

in accounty from Mr. lephon yeet day a protal same in which he stated that he could not promise from article by the 1th of they seek, the I cartle by the 1th of they seek, the I cartle be that the article was forthorning it will be very sunbarmacking in many verys you fail to puthink in. It would seem to that the time were eight for some official stilled over your own signature. Bless theyers do with disappoint me, and also were they be for the preferred or with the preferred or the property of the they proved to the the preferred of the they were the them they were the they were the they were the the they were they were they were the they were the were they were the were they were the were they were they were they were the were they were they were

in due écason. Vey jours, Sohn Estrann. Veontrey,

White and



The Scientific Publishing Company,

P. O. Rox 4104

Y M. GEER, Sec'y.

HERS OF THE ENGINEERING and MINING JOURNAL (Weekly.)

On orch 3ed 1888

J. A. ledien lesg.

Gen Jin: Jour favor of Jan 14th
is before we. You there state, that
you might be able to make known
in a few weeks, your process for

treating gres. We are very much interested in

this, and the writer would be glad to call and see you with reference to the matter upon any day you

may name Gery Gruly yours,

Edwin Bolitter for the Engriley. Joine Philadelphia Muchel 1 1886.

Mt. Jlan Mullish Mullish 1 1886.

Dean Sin:

The editor of "La Cirranjue Industriciti," 15 rue despublication in that well-known scientific journal, concise notices of important American inventions, processes, machine, etc.

If you will kindly mail directly to the Paris address above gipse a good-clear electrocyte of your marginer to the paris address above gipse a good-clear electrocyte of your marginer to the paris address above gipse a good-clear electrocyte of your marginer to the paris address above gipse a good-clear electrocyte of your marginer to the paris address above gipse a good-clear electrocyte of your marginer to the paris and paris

I would be glad to have deplicate copies of whatever printed matter you have, bearing on the details of the subject, together with any written suggestions you might wish to make.

Address

R. GRIMSHAW.

Robert Grinshaw, M.E., Ph.D., Franklin Institute, Philadelphia. HALL OF THE FRANKLIN INSTITUTE; of course Rend

1 with reep ent grims losed sheet shid interes

New Work, Much 19 1580 My Down Sin to fay author wish to Meals Park to monor (Saturday) 12 I would like yo to have in tabilated for can account ofthe number of has before are dittling at ful; about the milling office. I lome like also That tend to talk with me

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The Herald.

New York, March 25 1880

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P. W. Johnson.

Does Fox sleep sweets these nights?

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March 21, 1880

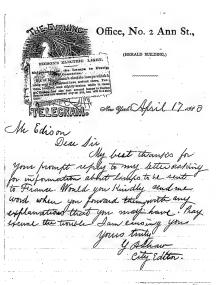
Dear Sin, - Stend we to introduce to your acquaintum the frank Beleen, an action on weath with whether, who decerns to see you with organist an identitated action.

Respectfully

6-6-loonant Ester Huper Waly

Mr. Thomas A. Edison

Office, No. 2 Ann St., Now York April 13 188 0 Dear her Edin: he your letter feet Tel 5 gm Kinds simuse Ju g ym prome again? Its truly Es & Shaw 6 Lamps have become to of witgerland, only 2 Grake - some hape been sent to England none get to frame but the well be soon



new Congland Hotel time . What I want to What you ca aproval feather fromto il atters, to advantage the latest tests of for it rather deforestet work matinal are as anich diffused werds Rank June been yaged almost

Rolely in lookingupall. The As the Am Union expect details about electric lefteten to prevent the Judgement in the Peage Rate being entered up I have not arrived at any decening yet what I will do I I mide a very interesting discovery of that is that Alterek are the inventors of the rict- angular, or auppour it will defind Storpetudinal mittered of winding an amature for which they claim & home an circumstance. John R. Regredon got so much credit I also found out aouether very interesting in regard to miny aouttling almost exactly the power as you propose to use. I come there to the city expection to go to work for the function. In fact of hand an idea of something when we the relay lunch! but I am undble to do anything with it at present

The Wabash Plain Dealer.

PLAIN DEALER PRINTING COMPANY, Proprietors.

THERON IT DEATOR. e Established 1859.
COUROULATION AFRIL 1st, 1880, 2,401.
Homas a, Echour Eog, (May 28 1880. Forar Sir We have always been a steadfast advocate of your Electric light
Dran Sis
We have always been a
shadfast advocate of your reledic light.
The Colones of John Calling
is a wonderful invention true should
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will use the electrolyte carefuly spromptly
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The Warden Plain Draler.

PLAIN DEALER PRINTING COMPANY, Proprietors.

Listablished 1859.
COINCULATION APRIL 1st, 1990, 0,401.
Wabash, Ond., June 15 th 1880.
Thos U. Thism En (
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Dear Sin
your Kind favor
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Whe in the Rlain Dealer received June
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arrived, Please fariand by Express
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Very Truly amy
Throng Keatur
N. B.
The ent-refused to is the one that appeared in Servicio american recently,
in beintific american ricutty,

The Graphic Company.

New York. Jul 23 1880 My Dear Sir We have to thank you very much for your thoughtful Kindress in sending us that espy of Lacronout, of which as you have seen, we made good This will be handed to you gour Mr. Horgan; and ans facilities which you can give Ring in the crecution of the purpose of his visit, will be affaceiges 3 us. Jours her his P. Girard Ditor of the fraghe: Thos. a. Edison

" Touthampton Let. Ung perso F E Tempp alug 13

Solow a province at Editor on any travels. Do my way home from this summer record of chall passe through hew york cit; and it is my purpose, all things being agreeable, to have down to heard fank for an hum or so, and seemstyne would my natural of which I have often written airest only by imagination. And am restricted as to time, I take the libert of enclosing a postate caid, addrepted to me here, on these of Abould be glast to have a line laying whether, if I should visit

your laboratory on Saturday, 21st august or Monday 232, I could have a glimpee of you election light dischiney and the Jamons railing - and at what hours the are visible. Busting that I am not impering too auch on your suely = tries good nature, I remain Francis E. Leupp. Southamplin, L. In aut 17 The foo.

Naples Systembor 5th 1880.

JOURNAL LE GOLFE DE NAPLES PEUXIÈME ANNÉE

critello a Taledo, 5.

and admind your pholographic porheit, and I thank you for they highly agreeithed mark of Kindneys. To acknowledge my

gratified I have the known to sent you some Me of the Colfe In Trayles of barday, in which I promit to the receives to regulace in a nead the your literess. - Now, in such a case, I should be very obliged to your if your would please to inform me defeation of the aumeter of casis your

could like to have and favour me, for the Mo is question, with some biographical notices. In the my newspaper, I want to

Teclar that the Golf is Reples is wire in its Kent for the freezing and bouriets in they and moret principle in they are moret

best holy of italien sowns and solly.

With the greatest amarkir and surfing the drucker Gaesano fase

New York Sept. 15/10 Mr. Thomas a. Ediene.

Boar Sir: Will you please advise us what amount

we shall send you in acknowledgement of the October number

of the Arth american Review,

and very much obligs.

2. P. Melcalf, Men. Tugs,

WESTERN UNION Telegraph OFFICE.

Co Naw Yorky Super 19. 18/60

Dear Live.

Stone just rationned from the overt man find your note. I will have your plats sent to you without delay and while ask ingraver it is con to clatetypen. When I was copies for a second edition I will trust to your paguiding thins. I have come out - 1250, but so we agest ing later I have only 12 capus life.

your tridy

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THE INDICATOR.

An Illustrated Journal of Mechanical Engineering and Applied Science,

Jamas a Edison Esq all right

Thomas a Edison Esq all right

Thenlo Parks N. f.

Dear Dis

Doead your paper in the Och. M. Au., Ker,
with pleasure, and I am so interested in
the Julijech that I should like permission
to reproduce it in the Och, number of this
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THE NORTH AMERICAN REVIEW,

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from the cely, beened the clear in repolying to gran meter of the 17 the. Please accept our very pricew thanks for the article on the plactice fight, to mise send by next made a for of capies of the Review.

Very truly priss, D. S. Melcay, Bus. Tago,

Boston Oct 1380. ERbidbown 409 Washington St., Boston Mass, Oct. 13, 80 Mr. J. A. Edison Dear Lir: -I propose. shortly issuing a "Seientific Annual," to contain a brief notice of the most important ecientific work of the year having a popular interest. If you would like to have reference made to any work done at your laboratory I shall be pleased to receive an account of

the same in popular and very brief form of this annual will be sent to 1,000 American newspapers, which will copy from it largely, any information it may contain will be eure to reach a numerous audience, and he very extensively read by the general public. Any communication should be sent me at once.

Yen Respectfully,

Estlehadbourn.

House opin, Brother, any our 24. Dear Fi Eurland please bind an account of a new appearatus In aghting gas struk Camps by electricity, which I famy they be of intent to you. Bannogs, the inventor, is a former reporter on the Bonton. Hunes, and I believe is the Dame man they sout to with wfo gum light some mentis Phase be some and inform me a full week in advance The general lighting up which other day. The bride of a Arteright sands hu argands , Boton Hual oboin.

Fines.

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SIXTY-SIXTH YEAR.

THE

NORTH AMERICAN REVIEW.

EDITED BY ALLEN THORNDIKE RICE.

October, 1880.

NEW YORK:

D. APPLETON AND COMPANY.

LONDON: SASTON LOW, MAISTON, SEALES & RIVERTON.—PARIS: TOE GALIOMEN LITELE BETLIN: A. Ameri & Co.—Geneva: J. Chembrusz—Rome: Londrez & Co.— MELBOURNE: W. Roseston.—YOROHAMA and SHANGUAT: Kelly & Wales.

TERMS.—Five Deliars a year. Single number. Fifty Cents.

[PHOTOCOPY]

THE SUCCESS OF THE ELECTRIC LIGHT.

Nor a little impatience has been manifested by the public at the seemingly unaccountable tardiness with which the work of introducing the "carbon-loop" electric lamp into general use has hitherto progressed. It is now several months since the announcement was made through the newspapers that all the obstacles in the way of the utilization of the electric light as a convenient and economical substitute for gaslight had been removed: that a method had been invented by which electricity for light or for power could be conveyed to considerable distances economically; that the current could be subdivided almost ad infinitum; and that the electric lamp was henceforth to be as manageable for household purposes as a gas-jet. But, so far as the public can see, the project has since that time made no appreciable advance toward realization. The newspapers have reported, on the whole with a very fair degree of accuracy, the results of the experiments made with this system of lighting at Menlo Park; scientific experts have published their judgments, some of them pronouncing this system to be the desiderated practical solution of the problem of electrical lighting which has vexed the minds of physicists since the day when Sir Humphry Davy produced his famous five-inch voltaic arc. . Still it must be confessed that hitherto the "weight of scientific opinion" has inclined decidedly toward declaring the system a failure, an impracticability, and based on fallacies. It will not be deemed discourteous if we remind these critics that scientific men of equal eminence pronounced ocean steam-navigation, submarine telegraphy, and duplex telegraphy, impossibilities down to the day when they were demonstrated to be facts. Under the circumstances, it was very natural that the unscientific public should begin to ask whether they had not been imposed upon by the inventor himself, or hoaxed by unscrupulous newspaper reporters.

[PHOTOCOPY]

296 THE NORTH AMERICAN REVIEW.

Now, the fact is, that this system of electrical lighting area from the first all that i was originally elaboued to be, manely, a practical solution of the problem of adapting the electric light to domestic stems and of ashing it as encomosited assolution for goalgide. The electry which have occurred to defer its general introduction are chargeable, not to any electric since discovered in the original theory of the system or in its practical working, but to the emonrous area of activated which have to be mastered before the system can go into operation on a large scale, and on a commercial basis as a rival of the existing system of lighting by gas.

With the lamp and generator which at the time of the first asnouncement is was proposed to use, the electric light could have been male available for all illuminating purposes as gas is now; the expense would have been considerably less with the electric light; the lamp would have been quite as manageable as agasburer. But, formutatly, the unavoidable delay interposed by administrative and economic considerations afforded opportunity for all control of the control of the control of the control of the dozen many essential modifications as the made of the very includin the generator and in the lamp; at the same time numbry important changes, all in the direction of economy and simuffication.

have been made at almost every point in the system, as well as in the details of manufacturing the appearatus.

As for the lamp, it has been completely transformed. The external form of the two types of lamp is identical; the principle of illumination—incandescence of a solid body for source—is also the same it sain, in the carrier lamp, light was produced by the incendescence of a platinean wire wound on a spool of ziroon; in the perfected lamp the source of light in incandescent carbon. Another, essential difference between the two is found in the form given to the incumbences thody; in the platinum lamp it was covided compactly on a small spool; in the carbon lamp is it a loop, some great control of the carbon lamp is a loop, some control of the carbon lamp in a loop in practice of the carbon lamp is a loop, some lamp carbon carbon lamp in the carbon lamp in a loop in practice of the carbon lamp is a loop some lamp carbon lamp in the lamp carbon lamp in the carbon lamp in a loop in the lamp carbon lamp la

This loop of carbon is now prepared from the fiber of a cultivated species of bamboo from Japan. A thread of this material, after undergoing a certain chemical process, is bent into the required shape, and then reduced to carbon. The resulting carbon loop is of a remarkably homogeneous structure, and possessed of a high degree

THE SUCCESS OF THE ELECTRIC LIGHT.

of tenacity, so that it can withstand, without breaking, all the concussions it is likely to be subjected to in household use.

The perfected lamp consists of an oval bulb of glass about five inches in height, pointed at one end, and with a short stem three quarters of an inch in diameter at the other. Two wires of platinum enter the bulb through this stem, supporting the loop or fishaped thread of carbon, which is about two inches in height. Tho stem is hermetically scaled after the introduction of the carbon loop. At its pointed end the bulb terminates in an open tube through which the air in the bulb is exhausted by means of a mercury-pump till not over one millionth part remains; the tube is then closed. The outer extremities of the two platinum wires are connected with the wires of an electric circuit, and at the base of the. lamp is a screw by which the circuit is made or broken at pleasure. When the circuit is made, the resistance offered to the passage of the electric current by the carbon causes the loop to acquire a high temperature and to become incandescent; but, as this takes place in a vacuum, the carbon is not consumed. The "life" of a carbon loop through which a current is passed continuously varies from seven hundred and fifty to nine hundred hours. With an intermitted current, the loop has an equal duration of life; and, as the average time an artificial light is used is five hours per day, it follows that one lamp will last about six months. Each lamp costs' about fifty cents, and when one fails another may easily be substituted for it.

The light is designed to serve precisely the same purposes in domestie use as ganlights. It requires no shale, no serven of ground glass, to modify its intensity, but can be gazed at without dazing the eyes. The amount of light is equal to that given by the gaz-jet in common use; but the light is steadler, and consider the state of the constant of the light is steadler, and consider which the state of the constant is an experimental deer not vitiate the surrounding atmosphere by consuming the complex that the constant is also a prere light than gas, because of the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant is a state of the constant in the constant in the constant is a state of the constant in th

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298

THE NORTH AMERICAN REVIEW.

of electricity consumed in each house. Finally, not to enumerate all the advantages which this system possesses over gost-lighting, the lamp can be manipulated even by the most inexperienced domestic servant; nor can the most careless person do injury to himself, to others, or to property, through not understanding its mechanism.

Another important modification of the system, introduced since the staces authorized account of the light var published, is the substitution of dynamo-machines for magneto-machines in the stations from which the clearizidy is to be supplied to the several districts of a city. Here, again, the change is entirely in the direction of simplicity and economy. Where before it was proposed to familia a station with one hundred magneto-machines with a multiplicity of being an experiment of the machine of the station with one hundred magneto-machines with a multiplicity of being and the station with one hundred magneto-machine with a multiplicity of being and the station with a work of the station of the station with a wear of which are stationary to the station of the station of the station of the station with a way considerable to a force or give. We thus the outty for machinery is very much incascool.

With those and other modifications of the system, which need not be particularized here, it may be safely allruned that the limit of economy, simplicity, and practicability has been reached. The time for experiment has passed; any further improvements to be made in the system must be suggested by its performance when put to the test of actual use on a large scale.

To the question which is so often asked, When will a public demonstration of the working of this system be made? we would reply that such a demonstration will in all probability be made at Menlo Park within two months from this date. The time which has elapsed since the preliminary demonstration of last January has been by no means a season of inaction for the promoters of this enterprise. There is a vast gulf between the most successful laboratory experiment possible and the actualization of the results of that experiment in a commercial sense. A prodigious amount of work was necessitated by the establishment of factories for producing the lamps, the generators, and the other essential parts of the system in large quantities, so as to be able to supply the first demand. We were about to enter a field that was practically unexplored, and, even on a preliminary survey, problems of the most com-plex kind arose on every side. These had to be solved before the first step could be taken toward the actual introduction of the light into our cities as a substitute for gas. The practical ongineer and the man of business can best appreciate the difficulties that had to

But preparations are being actively made for placing this system of electric lighting within reach of the people in all the great centers of population throughout the United States. To this end, cities are being mapped and divided into districts, each to be supplied with electricity from a central station; estimates are being made of the exact cost of plant in the different cities; contracts are being negotiated for the manufacture on a large scale of engines, dynamos, lamps, wire, and all the other supplies needed for the practical introduction of the system throughout the country; men are being trained to put up the plant of central stations, to run the machines, and to execute all the details of the introduction and working of the system.

A very important question is that of the cost of this light. The price of the electric light will, of course, be determined by the capitalists who invest their money in it as a business venture, but it will of necessity be low as compared with gaslight, though it will vary according to the original cost of plant, the demand in any given locality, and other conditions. It is not at present the intention of the company controlling the patents on this system to supply the light directly to consumers. The company will creet the first station in New York City, and will themselves conduct that station; but the other stations in New York, as well as in the other cities throughout the United States, will be managed by local companies, who will pay a royalty to the Electric Light Company for the right to use the system.

So much can be safely affirmed, that this light can be sold at a price which will make competition on the part of the gaslight companies impossible : I. Because the total investment in plant to develop a given quantity of light is much less; 2. Because the depreciation of plant is much less; 3. Because the cost for labor employed is very much less than in gas-works; 4. Because the electric-light companies will not have to make any dead investment in large areas of real estate; it is not even necessary to erect buildings specially to serve as stations, for the ordinary buildings, such

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300 THE NORTH AMERICAN REVIEW.

as are used for different brauches of namedature, will serve the purpose, and may be brief on remain i, i. Because the companies can sell-electricity for two ass—for light at night, and for power in the daytime. It has been scarcinated by experiment that power can be amplied through this system from treety-divelorate power can be amplied through this system from treety-divelorate power can be amplied through this system from treety-divelorate power can be amplied through this system from treety-divelorate power can be supplied to the checkents, printing precess, everigenations of the city pumps, etc., can be run by electricity from a central station for more economically than by any other means. A curvas of the city was the companies of the curvas of the city of the has shown that the demand for small powers in print to the central stations in the lower part of the city for ten hours daily. This power can be supplied at such a profit to the companies at onour than cover the expense of remaining the stations companies of the city of the of the c

THOMAS A. EDISON.

OR'S OFFICE OF THE SUN,

New York, Nov 16 1880

Dear my Edison:

The Sun would like

mething more as to how you are by on with the light. will you

so Kind as to name a Timo when will be convenients for you to see me?

Muly gas. a.M. Lypnan

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1880. Edison, T.A. - Autograph and Photograph Requests (D-80-008) [not filmed]

This folder contains unsolicited correspondence requesting Edison's autograph or asking for photographs of him.

1880. Edison, T.A. - Bills and Receipts (D-80-009) [not filmed]

Most of the bills and receipts in this folder are for routine laboratory expenses. There are also bills and receipts for personal expenses. Additional bills and receipts for 1880 can be found in Invoice Books, Cat. 1162 and Cat. 1163 (not fillmed).

1880. Edison, T.A. - Bills of Lading (D-80-010) [not filmed]

This folder contains bills of lading for the shipment of merchandise.

1880. Edison, T.A. - Book and Journal Orders (D-80-011)

This folder contains correspondence, bills, receipts, and other documents relating to the ordering of books and journals.

Approximately 70 percent of the documents have been fillmed. The following categories of documents have not been fillmed: advertisements, announcements of new publications, and other documents relating to items apparently not ordered; other and a coclepts that contain no information about specific items ordered; other outline documents that meet yet doplicate the information in the correspondence.

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F. W. PUTNAM.

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DEPARTMENT OF THE INTERIOR.

Venited States Geological Survey,

OFFICE OF THE DIRECTOR.

Say Francisco tel Oct. 12t., 1880.

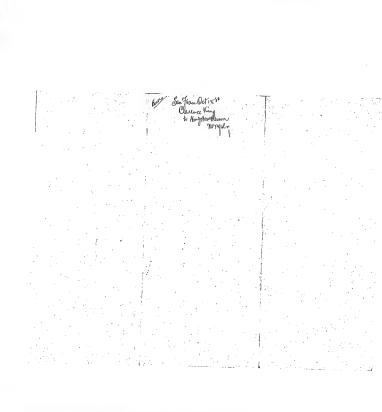
Hon. W. C. M. Cherson,

U. S. Senator.

Seabright, J. J.

Sir: I have the honor to asknowledge your communication of Sept 21th enclosing a letter from The A. Edison, requesting copy of "Seological Exploration of the 40th Tarallel; Tarallel; Lawe forwarded Mr. Edison's request to the Chief of Engineers, U. S. a., (by whom the volumes are distributed.) and are in Lopes that he will be able to furnish them.

Very neepertuly yours, Clause Ing



U. S. COAST AND GEODETIC SURVEY OFFICE,

Washington, Och 14 ..., 1850.

J. a. Edison, Eg Maulo Gark New Gray

By direction of the Superintendent, at the request of Mr. E. a. Carman, Chief Clerk of the Department of agriculture, a copy of Sigs been been freeded to your address by this days mail.

Please add nowledge receipt to

your respectfully M. M. Wines Coast blood the shirty. U. S. COAST AND GEODETIC SURVEY OFFICE,
Washington, Oct., 14, 1880.

Mr. E. a. Carman Chief Clerk, Dept. of ameulton Washington, D.C.

Dear Sir:

So meet the request made in your letter- without date-, a copy of Six bee's Bup- she show forward the she down forward by this day's mind to S. a. Edison, En'z. Haulo Park, New Heavy by direction of the surperintendent.

Yours respectfully

M. M. Mines

M. W. Wines Const oles dete Surry.

The Throng Pory. Cet 14 1870 refort for 1878 which mr Jabdison Defir, sophical Society has come to light I send it to yo by Apress frepan



Office of the Chief of Angineers,

Washington, D. C., October 28., 1880 .

Mr. Thomas a. Edison, Menlo Park, N. J.

Sir:

The Director of the U.S. Geological Survey has refund to this Office your letter of the 20th Sept. last, addressed to Senator Mr. Pherson, requesting a set of the Ulports of the Survey of the 40th Parallel. In reply therets I am directed by the Phief of longinisms to say that volumes 1, 2,3, 45, 6, and Geological and Soprographical Atlas are sent to you by registered mail this date, from a few copies reserved for colleges, libraries, +c. Volume 7 has not yet been published.

Your obedient servant,

9. 4. (m) Major of Engineers.

(3420 G. R. 1880)



46 CHARMS CROSS, MONTHLY STATEMENT.

J. a. Caison Eq. New York, Oct 1880

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SMITHSONIAN JUSTITUTION,

WASHINGTON, D. C., M. 16 1880

Chroix

Dearfri, It gives us pleasure to be able to comply mich your request in behalf y Mr. J. a. Edian, and the Reports he detires are cant to him by mail. Very bucky yours, MajRhels

Gul Ca Rarman, Obj Clk agrimblume Dept, The was some and the Dan has her Mosel at 1860.

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Dear Sir: 184 Coffee State Santage Engineer, THE SANTAGE ENGINEER, TO and after January 1st. 1881.

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1880. Edison, T.A. - Clubs and Societies (D-80-012)

This folder contains correspondence, bills, receipts, and other documents relating to Edison's membership and activities in social clubs and professional societies. Also included are requests by clubs and societies for lectures by Edison and for exhibits of Edison's inventions.

 $\,$ All the documents have been filmed except for blank forms and duplicate copies of correspondence.

Syracuse gary up so Acadolita & Sweet _ 1 The thousand in a few days and in from the one the control to a change all forest on some and result book T. A. Edison. Something the second of the second of the Burney Brichery of Children of William Dalla her giber a sugar The service of the service of the Carlo March Land St. Carlo Hall Charles Co. Type to the to the total of the firste of the form the freemanifes ; and the a desirety.

11 Sibridge St. Ournouse. Jan. 2412, 80.

Dear Sin, It has been

suggested by a mumber of pretty prominent Engineers that an Association of Mechanical Engineers would be desirable. This thought is endonsed by beavily, Holley, Thurston; Ponter, Buch, Emery , tysfrom and many others; and Mr. Bailey assures me that he thinks you would interest yourself in the matter if you could be assured that it was to be a National Association . Of the 30 on 40 who have

אלגפטויבר לונון יות צים

been consulted which the finatten and who represent all exparts of the country all express themselves as heartily in Javor of the move, and a meeting to which you are hereby invited to called at the office of the American Machiniet, 96 Fullow St., New York Feb. 161th, 1850 at 100 clock sharp, Jon the pum pase of taking ateps for onganging such a Society. Very muly yours,

Files who seems to the second of the second

Edison To Paleteln up all night and just gone to be thinks they had interest home forgotte

The American Society of Mechanical Engineers.

239 BROADWAY,

New York, March 15, 1880.

DEAR SIR:

A meeting, to organize The American Society of Mechanical Engineers, will be held at 11 o'clock a.m., on Wednesday, April 7, in the Hall of the Stevens Institute, Hoboken, N. J.* You are invited to attend.

At a preliminary meeting of engineers, held in New York, on February 16, a code of Rules was unanimously recommended for the consideration of a committee on organization, to be appointed by the chairman, who was also to be a member. This committee is: HENRY R. WORTHINGTON, ECKLEY B. COXE, JACKSON BALEY, GIN, Q. A. GILLEMORE, PROF. WHY. P. TROWBEIDGE, M. N. FORNEY and ALEK, L. HOLLEY.

The following committee to nominate officers was appointed by the meeting: Prof. John E. Swelt. E. D. Leavitt, Jr., Charles T. Porter, Henry R. Worthington and Alex. L. Holley.

These committees will report to the meeting on April 7; rules will also be adopted, and officers elected.

The chairman of the preliminary meeting was requested to call the meeting for organization.

In the Rules recommended at the preliminary meeting, it was provided that candidates for admission as Members, Associates and Juniors, shall present to the Council brief written statements of their qualifications for admission. (See appendix). After correspondence with a large and representative number of the attendants at the preliminary meeting, the chairman believes it to be the general with that all persons, heldning the attendants at the the preliminary meeting, who delier admission to the Society, shall present such attendants to the clerical April 7, in order that the standard of qualification which may then be adopted shall apply equally to all

Yours respectfully,

A. L. HOLLEY,

hairman of the Preliminary Meeting.

Reached by ferry from Barelay Street and Christopher Street, New York.
1:Anticipating a large autoriance, he first applied to Dr. Monroe, President, for the use of the large hall of the Stevens Institute, a content and satisfable place. Dr. Morroe at once put the Institute Bindling at the disposal of the Society.

APPENDIX

Extracts from the rules recommended by the preliminary meeting to the Committee on Organization.

MEMBERSHIP.

- ART. 2. The Society shall consist of Members, Honorary Members, Associates and Juniors.
- ART. 3. Members and Honorary Members shall be professional Mechanical, Civil, Military and Mining Engineers and Architects.

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- ARY, 4. To be eligible as a Afendor, the candidate must have been in the practice of his profession for at least seven years, not merely as a skillid workman, but as qualified to design and execute engineering work, and he must have been in responsible charge of work in his branch of engineering.
- ART. 5. Honorary Members, not exceeding 25 in number, may be elected. They must be persons of acknowledged professional eminence, who have virtually retired from practice.
- ART. 6. To be eligible as an Associate, the candidate must have such a scientific or commercial connection with applied science, as will qualify him to co-operate with engineers in the advancement of professional knowledge.
- Air. 7. To be eligible as a *'Junior*, the candidate must have been in the practice of engineering for at least two years, or he must be a graduate of an engineering school. [The term "Junior" applies to the professional experience, and not to the age of the candidate. Juniors may become eligible to membership.]
- Airt. 8. All Members and Associates shall be equally entitled to the privileges of membership, provided that Honorary Members who are not also Members or Associates, and Juniors, shall not be entitled to vote, nor to be Members of the Council.

FEES AND DUES.

ANT. 18. The initiation fee of Members and Associates shall be \$15, and their annual does shall be \$10 per year, pupids in advance at the annual meeting, provided that pursons elected at the meeting following the annual meeting shall post, and persons elected at the meeting proceeding the annual meeting shall pay \$4, as does for the current year. The initiation fee of Juniors shall be \$10, and their annual dues shall be \$5 per year, pixaphies advance. Any Number or Associate may become, by the payment of \$150 at, any one time, a life Member or Associate, and shall not be likel thereafter annual dues.

(The rules also provide that the annual meeting shall be held in New York, but that the two other regular meetings shall be held where and when the Council may determine.)

placed in the hands of the Council at their first meeting. Very Respectfully. Jurgus B. Novie freus.

The American Society of Mechanical Engineers,

.I have been requested to inform you that your application will be

Dear Sir:

THEADERS OFFICE.

OF Fulton Street.

New York, May 12 1880.

Mrs. Tho: A Gisen, Mende And.

To the American Society of Mechanical Engineers. Ar.

Onitiation Foe, as Life Member & 150.00

Received Bayment, May 20. More

Start check
The American Society of Machanical Engineers,

TREASURER'S OFFICE, 96 FULTON STREET

New York

DEAR SIR :

The Council of the Society at a meeting held in New York, April 19, resolved to publish in pamphlet form as soon as possible, the names and addresses of the officers, members, associates and juniors of the Society: also the Rules as adopted by the organizing meeting, April 7, 1880. It is believed that the distribution of this pamphlet will advance the interests of the Society more than any thing else that can be done prior to the annual meeting in November. For this purpose immediate funds are necessary. When remitting for the enclosed Bill, please address the Treasurer of the Society, giving accurate particulars of your title, firm, or occupation, also, your full post office address, for publication in the catalogue of the Society.

The Committee also request that you will kindly forward them at the earliest date possible, if not already forwarded)a written statement of your professional experience and various business connections, as required by the Rules of the Society.

Respectfully Yours,

LYCURGUS B. MOORE,

Treasure

What about this?

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Myway - 1880 Ljeungus Blevor and sent cheeliso

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

TWENTY-NINTH MEETING,

TO BE HELD AT BOSTON, MASSACHUSETTS, AUGUST, 1880.

Is conformily with the vate at the last meeting, the Twerr-curre Merraro of the Association will be ided in Secretary in S

The Headquarters of the Association will be at the Massachuserrs Institute of Technology, where members will register as soon as possible after arrival. The Horke Verbour, corner of Commonwealth Are, and Dartmonth St., has been selected for Hotel Headquarters.

The offices of the LOGAL COMMITTER and of the PERMANENT SCENETARY WIll be at the ISENTUTE OF TERMINGTON. The General Sessions will be shell in HENYSTEPNE HALL in the same building. The several Sections, Subsections and Committees will have their places of meeting designated on the procramme for Weinseaday.

The circular which will soon be issued by the Local Committee will contain full information in relation to Hotels and Boarding Houses in Boston and vicinity with which special arrangements have been made.

The Permanent Subsection of Chemistry will be continued at Boston under the chairmanship of Prof. John M. Ondwar, of Boston.

The Permanent Subsection of Microscopy will be presided over by Prof. S. A. LATIMORE, of Rochester, and the active cooperation of microscopists is requested. Arrangements have been made for the proper ears of instruments, etc.

The Permanent Subsection of Anthropology will be under the chairmanship of Prof. J. W. Powell, of Washington. For special circular and information in relation to this subsection, address Judge J. G. HENDERSON, Secretary, Windester, III.

The attention of canomologists is directed to the annual meeting of the Extronocourant. Clum or ran Associaron, while this beside at the rooms of the Boston Soletay of Natural History as 2 o'clock, on Tuesday, August 24th, at which all interested are invited to be present. Mr. S. H. Scomen, of Cambridge, President, Mr. B. P. Maxs, of Cambridge, Secretary of the Club. (A special circular concerning this meeting will be sunt to all requesting the second processing with some solid processing with the continuous concerning this meeting will be sunt to all requesting the second process.

At the Stratogs meeting the desirability of forming a new subsection in the Association, which should be devoted to Physicology and Anderson, was discussed with the special object of indicing members interested in Human Physicology to bring their papers before the Association and also of obtaining the active cooperation of Physicians and Surgoons in the work of the Association. The interest taken in the proposition at Savatega was such that a premanent organization of the new subsection is expected.

at the Boston meeting. It will also, probably, be found necessary to form a subsection of Geology and Physical Geography at the Boston meeting.

Several excursions will be arranged for by the Local Committee. Among others, one is planned for Salem and another down the Harbor. On Thursday, the Association will probably hold a morning session in Cambridge, after which visits will be made to the various departments and Museums of the University, followed by a reception at the Botanic Garden and the Observatory in the evening.

All communications relating to the local arrangements for the Boston meeting must be made to the Local Secretaries at Boston, while all matters relating to membership and to the presentation of papers will be attended to by the Permment Secretary.

Attention is specially requested to the following articles of the Constitution of the Association. ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, nomination by the Standing Committee, and election by a majority of the members and fellows present in general session.

(Blank forms for recommendation to membership will be farnished on application to the Permanent and Local Secretaries, and, until the day of the meeting, they will receive the recommendations for the General Secretary; after the meeting lass begun, recommendations must be given to the General Secretary.)

Aur. 4. Fellows shall be nominated by the Standing Committee from such of the mor engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members and fellows present in general session.

Arr. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and

shall be entitled to all the privileges of a member and to all its publications. Arr. 7. The name of any member or fellow two years in arrears for annual dues shall be crused from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reflected.

Arr. 33. The admission ice for members shall be five dollars in addition to the annual assessment. On the election of any member as a follow an additional fee of two dollars shall be paid.

Aux. 31. The annual assessment for members and fellows shall be three dollars, Any. 85. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member, and as such shall be exempt from all further assessments, and shall be entitled to the Proeccilings of the Association. All money thus received shall be invested as a permanent fund, the income of which shall be used only to assist in original research, unless otherwise directed by manifolds you of the Standing Com-

Air. 36. All admission fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same

ART. 27. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practhen before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Standing Completes to the Sectional Committee until an abstract of the paper or the paper itself has been received.

(Blank forms for giving the titles and abstracts of papers will be furnished by the Permanent Secretary on application. The Standing Committee particularly request, in order to facilitate the arrangement of the programme, that the titles and abstracts should be forwarded so as to reach the Permanent Secretary before August ninth. At the Saratogn meeting the Permanent Secretary was instructed not to enter, on the list of papers to be presented, any titles of papers until an abstract of the paper, or the paper itself, was received.)

Notice of errors in the printed list of Members of the Association, of change of address, and information respecting the decease of Members, should be sent to the Permanent Secretary in order that due notice may be taken of the same in the next volume of "Proceedings." It is particularly requested that the Permanent Secretary be notified at once of any errors in the names and addresses that will be given in the list in the Saratoga volume, as a revised edition of the list will be printed for circulation at the Boston meeting.

The Saratoga volume (vol. 28) will soon be distributed by mail to every member who has paid the assessment for the Saratoga meeting.

The volumes of the Proceedings of the Association (28 in number) can be obtained from the Permanent Secretary, at the price of \$1.50 a volume; or any member wishing for ten or more volumes, in order to complete a set, may obtain them at \$1.00 a volume. The volumes may be had bound in cloth for the extra price of 50 ets. each, or in one-half Turkey morocco for the extra price of \$1.00 each. Uniform cloth covers for the volumes will be furnished by mail at 30 cts. each, or by express or at the meetings for 25 cts. each. Copies of Volumes 2 and 25 will be received in exchange for other volumes or will be purchased at \$1.00 each.

The Memoir on Fessil Butterfiles, by Mr. S. II. Scudder, published by the donation of Mrs. Elizabeth Thompson, 4th, 1874, will be furnished at \$2.00 a copy. The Transactions of the Association of Geologists and Naturalists, 1 vol., 5vo, 1845, bound in ciche, and be obtained at \$3.00 a copy.

It will save much time and confusion at the meeting if members will send their assessments he advance to the Permanent Secretary, in return for which a Member's tleket, bearing a receipt for the Boston meeting, will be forwarded. Members not intending to be present at Boston are particularly requested to send their assessment in advance, and to those who specially request the same a copy of the Boston Daily Programme will be mailed.

The address of the Permanear Secretary will be Salem, Mass., until August 1st; after that time, and until the meeting has adjourned, his office will be at the Massachuserts Institute of Technology, Moss.

SALEM, MASS., June 15, 1880.

Permanent Secretary.

OFFICERS OF THE BOSTON MEETING.

President,—Lawis II. Monoan, of Rochester, N. Y.
Vee President, Section A.—Asarvi ILLL, of Washington, D. C.
Vee President, Section A.—Asarvi Asarvi Cambridge, Man.
View Frenders, Section E.—Asarvi Asarvi Cambridge, Man.
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STANDING COMMITTEE.

Plate Presidents.—Biocaster Prince, of Combridge; Lawre D. Data, of New Thoron; Lieu-Hall, of Allany; Stretter Laxes, sons, of Princeton; Isaan Lan, or Platelly Stretter Laxes, sons, of Princeton; Isaan Lan, or Platelly Stretter Laxes, sons, of Princeton; Isaan Lan, or Platelly Stretter, Stretter Howe, of New York; D. A. Goora, of Blotton; T. Strenzer Howe, of Montecul; A.S. Gay, of Cambridge, J. Lawrence, Strett, or Learning, 1997, and Thoron, of Cambridge, 1997, and the Cambridge Stretter, of Cambridge, 1997, and 1997

The President, Vice. Presidents, Fernanent and General Secretaries, the Secretaries of Sections A and B, and Treasurer of the Meeting.—George F. Barken, of Philadelphia; S. P. Landler, of Allegheny; J. W. Powell, of Washington; H. Carrisonov. Borros, of Hartford; W. H. Dael, of Washington.

From the Association at large. -Six Fellows to be elected on the first day of the meeting.

SPECIAL NOTICE TO THE HEMBERS OF THE STANDING COMMITTEE.

The Constitution requires that the Standing Committee shall meet on the day preceding each Annual meeting of the Association and arrange the programmen for the first day of the session. There will therefore be a meeting of the Standing Committee at the Ensurement of Theoremston, Botton, on Traceday, Account Path, as 11 a.m., at which it is expected that every member of the Committee will be present, if possible.

By order of the President a Special Meeting of such members of the Standing Committee as can conveniently attend is hereby called at the ISSTITUTE OF TECHNOLOGY, Boston, on August 9th, at 11 ofclock.

F. W. PUTNAM, Perm. Sec'y.

OFFICERS OF THE

LOCAL COMMITTER

FOR THE BOSTON MEETING.

PHOF. WILLIAM B. ROGERS, Chairman. Mr. Charles W. Scudder, Treasurer.

MR. SANUEL H. SCUDDER, Secretaries. Addre

Address NATURAL HISTORY SOCIETY, Boston, Mass.

Society, Boston, Mass.

SUBCOMMITTEES.

On Reception.

Mayor F. O. Phince, Chairman; and Mr. Nathan Appleton, Secretary.

On Finance.

Hon. John Cummings, Chairman; and Mr. Samuel Wells, Secretary.

On Rallroads.

Gen. A. P. ROCKWELL, Chairman; and Dr. J. R. CHADWICK, Secretary.

On Hotels and Lodgings.

Gen. Francis A. Osborn, Chairman; and Mr. E. T. Bouvé, Secretary.

On Rooms for Meetings.

Prof. J. M. Ordway, Chairman; and Prof. R. H. RICHARDS, Secretary.

On Mails, Telegraph, and Express.

Prof. C. R. Choss, Chairman; and Dr. Clanence J. Blake, Secretary.

On Excursions.

Mn. Edward Atkinson, Chairman; and Mr. Hamilton A. Hill, Secretary.

Cambridge Computities.

Mr. Alexander Agassiz, Chairman; and Prof. E. C. Pickening, Secretary.

Salem Committee.

Dr. HENRY WHEATLAND, Chairman; and Mr. Richard C. Manning, Secretary.

The above, with the Permanent Secretain of the Association, form the Executive Committee of the Local Committee, which consists of over three hundred other gentlemen and ladies.

Diene



1880. Edison, T.A. - Creditors (D-80-013) [not filmed]

This folder contains correspondence relating to unpaid bills.

1880. Edison, T.A. - Employment (D-80-014)

This folder contains correspondence from or about employees and prospective employees.

All letters that contain a significant response by Edison or that are from individuals associated with Edison have been filmed, as well as correspondence from individuals who were subsequently employed by Edison. Approximately one-third of the documents have been filmed.

interview if you wish it . In case you should wish to Employ [LIMITED.] one, I should have to five my Dixbury Station, Jan 3 " present employers due notico. Jours Druly, Charlewise. Dear Sir. Tho? a. Edison Esq. I wish to get suployment to Menlo Park. in Soms Electrical works, If you how't a vacancy in four laboratory I chould Can gueyou a pacition like to fill it. I am at present in the angles american Tel Co. Dury bury I think in less than Go days at a better as mechanician, have been here 10-2 Oalary will nalify you Jeans. I have a practical Knowledge of Electricity, Testing ste, as well as the principle Electrical instruments. Save 30 days alcoding settire charge of the working of this can get you the parlin station. am of an invention turn of mind . My improvements in cable inst of an Electric hight have been in use here for 5 fears Bresent Salary \$ 1200 per annum -Married . Can come on for

T. A. EDISON.

May William

1880.

Can we have the man your

Choke to carman for the feeling and when

left to act from the Hast ford Times. Chat you had in your employ a German Glefo Bluver, franz horn from the works where the Gersoln little are made, Demelade 15 with to you upon that fulged-Than had 15 years procested professione in Santo Cleaning and wife to a few of each some cannot on the largest blad lishon out in Paline manifest wing bland in Soft of the form with the south of Below Tops of the Soft of the south of the sou and have also made a large ound of Gensler tutes,

Being out of business at speciments of some of the streng agreement of some streng agreement of your Lamps etc. De cornel to be please to be an end to be a please to be an end to be a please to be a specific being to be a streng will come on form an interview. Very Referlfully 1829 Hodger 1313 Charles Streng Rein

Machinery and Supplies I am as you know a educalin ans practice, I have been a Rolesman eversince I became acquainter with you which was when you were over Does not suit any families health, and there fre I want

to go hast again, both night and Addies. 145 Sheffield S. Dea Siry has a riply unes I will case on you ray - Jue day -

My Febry 11,50 Work allium Coros strong letter)

New York, Feb. 11# 1880.

Mr. Thoe. A. Edison, Mento Park, N. J. Dear Sir,

Suginees by education of perofesaron of am desirone of obtaining a position in your business or with some one of the concerns in which you are interested. I was for some time with Mrs. Hamilton E. Jowle, Civil or Mile Engineer or Patint Expert. I want to Europe for him of remained there a year attending to his foreign patint businesse, or making contracts, or introducing patints. I travelled in England,

Germany, France, Switzerland Belgium & Holland. I graduated at the Rensselaer Polytichnic Institute as a Civil Engineer & have in consequence a thorough theoretical knowledge of electricity & machinery. I also have a practical knowledge of both by experience. I am a fair telegraph operator & understand the irection of freeza management of telegraph lines, as I have done both. I am a good draughternan in every particular. I am now with Mr. Samuel Hay, Michanical Engineer Cor. Broadway & John St. - this city. Mr. Soden who is about to sail for Europe for you is acquainted with friends of mine; John Ott, machinist, now with you was with mr. Towle while I was & will

probably remember me; Mr. Charles Cheever is also well acquainted with those who know me in a business or private life one of whom is Mr. John B. Benton 30 Cort. landt St., Civ. & Mechan. Eng. I can give you any amount of reference as to character & ability: I will only mention R. G. Eunson, C. E. 196 B'way, * Mr. J. R. Smith Vice Bust Star Fire Ino. Co. 141 B'way, & Mesers Haseltine, Lake & Co. featint attorneys & Southampton Blage, London, E.C. England. Trusting that in case you have no vacancy you will put this application on file I remain Respectfully yours

Milliam M. Allaine

358 N. 32 5 St.

([LIMITED.] Qualuty Station, Feb 13th 1880 Dear Sir, Area wer, Jon requested one to drop you a live total to round you of my application for a forestow. Der one letter of 3th Met. If you still have same position in riew, I should, at your convenience, like to see you personally about Jours Douly. Charfutties. Lo J. a. Edison Seg 7 Manlo Park

of Foreliam MMar was of Programmes

Fordham, New York City. March 20, 1883.

Mr. Thos A ledwin,

My dear soit
if you have any treasury in

which you could make slow of

my services - I am, as I believe

you are ansare a graduate of the

Stevens potterte and have write

lettly been a Fellow of the Johns

Hopkins University - of you have

naid of any such help as trends af

ford you I mile sulf, as frank of an

opposituaty to state my qualifica
time more in detail lettle four

spelly or by lettle, - I mill only say

I am familiar mith the graphice

up Forthern MyMar 14,850. Wroll organi who we amend to be a measurement of measurements of such as a fair Mooree of senting.

They have your Agree. As The A Elisary ille dens size-I wow him any browners which is a south make dige in the are given; a graduate of the a Fellow of the folion Hopking University - If you have opportunity to the my males and smally or by letter - I not only some

New York Mch. 26th 1860.

Prof. Thre. A. Edison, munfor Park, R. J. Doar sir,

I made application to you for employment by a letter which you were so kind as to answer, easing you would place my application on file. I has to submit the encioned not with its indorsement which if you will also findly consider of place on file I shall be much obliged to you.

Respectfully yours, William The Allaire

358 7.32 St.

DODGE, POTTER & CO.,

34 PINE STREET,

Stenographic Letter of Partner.

NEW YORK, March 25,880

Denr Sir,

The leaver, my Wing M Allaine, is decision of applying for a foortion in connection with the Edison Electric Lights.

I believe him to be a going man of strict integrity and considerable ability.

He preced through the Rensellair Poly--lechnic Institute, at Troy, My, where he graduated so a Civil Engineer.

His connections are first class.

Could you kindly give him a note to me Edicon, which would mo doubt be of great service to him, in his proposed plans - and oblige,

Geo: Brescott Eng (hall Body)

Respectfully referredo

To Prof. Thos. A. Edison

I know live. Rodge, who
write this moto, autometre
him my good authority
in a matter of the kind

Norw Green

March 26. 780

The away 1. O. Edison Leg. Menlo Paik New Lorsey Dear Lig Mo & Arhonson handed in y Glacet me your cable paying of Insul can translate hench pendhima to which I was unfortunately compeced to uply No requestion gow will have understood flow this that & cannot Franceato French, which I very much regret. I am easy that you chauld have had the house of carling without any went of Mygune 23.80 John 23.80

served my time at fee manufacturers, Netyford him, Ens ales in the tool I model depart ment. I worked in Hear York during the read and them. reliefue to any old job. Now have never worked in any Electric works but

have been dabbling in itduring all my phare time for years and love the light in my dast of the Guntry - I have been back in New York about Wing months and and employed by Tree Hor Drinting Hose, makers - buf would prefer lighter wolf - & can exply You with first-clas references. Mit for well would for you ability Hespertability vix necessary & can send to the other side for fusher Credentials - This wife reach you through the Courtby of Mer Venkins of Dreyer Morgan & Co. and Chould for Think it worth

Port while knish answer Harry his to you channed by some to you may be found by any will be at your channed whenever you have a breating of whenever you have a breating on Jones to entouching on Jones to entouching to much be ternam Thy tespectally Sound A 36 Sight away have May York Out

The Edison Telephone Compuny of London Limited, Herse take Care that nothing Concerning Quarell's application for a position with you reache also bear in riend that are my Correspondence & to me while there - is Kept Confidential

1 hu

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J.a. Edison Erg It will be nine years this fall when I began to rebuilt the humaral Private Luce Frinters for the Gold 4 Stock Telegraph company - I have since stick to them like glue, and with the new Company now on the verge of going down with the printers. it is now only a matter of a few months and the last of them will be taken in + Thomes put in there place, The phones do not require the same class of attention is the printers, hunce Horse car conductors, will muste pretty good inspectors. My Mornolisty of Electricity - Chemistry of Civil Engineering aught to brung me in Something better chan the Telephone inspectorship which is now ni view for me, carnestly request that you will give one a chance at something where my Knowledge in the above will be brought to a better advantage try me again for another zight, year terre Yours l. G. Wagner

Care of Min Moungation Broad Harel iller. Mangel & 8th asc Drai 6,3 W. Baron If are more counting morning Mindlebrist of you with to come 236 East 104 Th Street Should when to dec you and son you can have a gab for as forstille 30 d an hour if you wish, Otherwise please let makerow ax and about of me Know in case That you are not enolined to Tricky yours Truly yours Hacitai Herman Cen 27R July 9 1810 M26.80

Memorandum.

Thom Dreach, Morgan & The Mr Inffer Nath She comer Broad,
New York July 24 1880

Dear Sr.

The Bearer of this note dances Holloway Eng, is a She gentleman I spore to you about, It is a sery good neechanic and anything you can start him will greatly oblige your cury timbe.

At Jeineis

B. Elslich Esq. 18 Coles street Jersey City Dear Gu The man I have engagod notion of any application was seeved. has not come and is that place macant If you are willing To Take it please Dame an Mounday 9. a. B.

Jr. Ehrlich

18 Coles street

Lorsey City

Con agreemen to gar. of the 1870

We have no trooming gust

con but may fine a dience
for you, in a chast time

Touly yours

EXECUTIVE OFFICES EDAR CTRE

My dear Edriow;

I wrote Crosby a letter to Shaver last week giving him a piece of my mend for leaving your laboratory and telling him it Embarraised me as it was I who got him in your suppley. I told him if he runained There I arriedness have any thin more todo with him but if he would return I would give him a position in the Festilize Co. as agent. He replied promptly disavoury Strongly any desire to reacal any secrets he night have learned in the laborating and wound up by saying he would at ance Start for neurok. Yesterday le arrived here. Lauson Lowener remained. Did you got the dample & alle maile I send you the other day? What do you think of it How is the motor Co. progressing ?

andrew terhane Rahway NJ. Chas, W. Mourdock Woodbridge No I you want to the engaged as an aprentice in our Samp factory come

Millioning blace.

Millioning blace.

Millioning by Millioning the syon of the part the present to lang grand to late the present to language with you. I am world gringed Mosching and gringed Mosching or Making and gringed Mosching for Metall, could not efter look of metall, could entitle faction were an opportunity of your entire softened at one.

Can time of one of lover an opportunity by setunded to me.

Can time of one - if lovered.

Manshippy by return mais and office.

Month Regist.

Are age not in need of thelp now but will file this aft. It write him if we want a man

Millan Brade No 9. Orange Place Newarta V.I. We are wanting one more Madeinist if you wish to take The place please come Seo. F. Mayor immediately if not let me Ihowen mithaut Dalay P. C. Trahway N. Y. Aug 3/(1200) Wugher Horner Dear J. Mours at a. 19th rood I'm a who would day Ennest aring me an inthotoms cles. Solisan parallhost pay Two pass Books & matalice Carrest within he was Fit the San Day Dair curefrait was by. It were plan to Buse. To experience more This or angh

Albert Alitobal 14 ave a. N. y. Well pay from \$ 15-00 week To start on and prooved to be watth in If he is willing came and T.Q. & J. A. Edison Big. there by Monday the Mr. Carma Porette Chas. Racting a sect that his Somes are not long of the form of the form in Ha Cast Enveloped Tomorrow Short of the receive

Dear six, Received the hast time a hund of treatment of come of gave and before more and hundering the way the major and distance the transfer and distance the transfer which put were in a pacultary letter of the work that the others town more and without the weeks ago a man who had been my work that for ments half a year nowell to the whether the agent world to the work of a sum and break my nearly half a year nowell to the whole of the work of

day of Batch and I had a diverge, ment from a saver out worth to to ment to ment to the to that each to hear that I had to hear that I had to hear that I had to hear that one wife to make a dem said better affect that and that he housed by people that and wonderful the house by people that and proof them I saw then I generally and the many fraites my him simposed through fraites my him simposed through for the finite my him simposed through for the many for the said through the cost, the said through the cost, the said the said

whole weeks delay. What I worked for was progress I'd did not walk be progress the last time because I liked the parties It had to deal with not because I liked the treat neut of received for the services I have rendered, but be rawed sympathized with you, because I liked the great problem we neer working an. But northing havegane too far Fara few Days Itake a vacation toge an my unile's from which & Find not see yet. Then I came lack to hear whether you agree with the Things described. In conclusion I say that I do not want brigher vages and that & Do not want to interfer Remaining your ober cut no Ludwig H. Bohn

EK Bocken Ov Is

Fre my

Notrobey At 90th 1889 To M. Show F. Edward B. D. Dearwin

I hereby inform you that I am having obside Dail and speed someon and It known to you already, I his like the headment I necessed for the sources I have amended that some of your anisted that some of your agree for any longth fitten. I there gan and long the fitten. I there you may present pour there is made of the which I there are for any foresent pour there is a the foreign after the which I have foreign a the sound as a the sound as the sound as the sound a the sound as a the sound as the sound as

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overste already last ovals.
I am sur suspectfully yours
Ledwight Bobin

23 President At. Ost 94.24 you to write one for me at No This is to Certile by to morrow evening and should nery much like to have it then. Mon. Frank Mr. From has All sugares Engines in Me son and your Out ... Yours Very despect of in carry regards He leaves the possition on his on accord T. a. Edin

OSCAR BOOK

LICHTENHAIN bei Oberweissbach

Lichtenhain bei Oberweissbach, den 17. Novembet. 1850.

from Elisson in New York

Da Thre genow chresse mer unbesamt ist, whalpe mer and hiesen 110g, Iwah Treundes Hand, much Thomas ale Ellas Alas ic hur emplobles.
There have with urbahum, Jass em Unogocker.
Haus Iwah uner of genten Eles Alasee sweep from dosselfer aber, with wermelhe aber, was Ihn, no Jama es igt.

Langer hist in un united Elestrapher Substil, land Jear suld have suld light blace suld late light blace suld late light blace suld late light blace suld late light juden frame, mytem ketristen familianskiper thas even a abu. Tude the land in liste stranche interfett ist, so him lid gesome interfet in mount in suld gesome interfet in mount in suld gesome in mount.

Olmerika por porachen Cinnige Taker Seesselve on Earlow gearlaidled his sin in alem Alastranov angenvikel noas his aleekasilken & noissan Shafledham Calpterimenten ve fordalaik ist ekonso on Theomorphon, Darameton v. 1.0 & heeft Jaker ant Batchafd estalar, Jakertalion Turch minne Telslang

leprietigen mi bannen. Salten Sie John miets in There Taketh andeller komm Errollen for tille Sie, mie Thu Minganger on sellen f Du jegmentigen Alberan hommen Kennke lalazze lin Thney embredes Thur pf umgehinden Nachrichten und zezen schen?

[ATTACHMENT]

Theenelow by Mr Free JWeiss cho 316 E 84 St My Cityame Canbead freeze

riffin Lell this man that we use a great many glastly but we cannox promise him anything; & the experience with previous Geissler glassblower is anything but patisfactor for manufacturing work. We put it a quat bleat easier to work Than try to get experimental manufacturing work, or about this

For the present me and Lully suplyed Sed-wice Hees you are an fice There may be a main wife your capacity muited Chilerober

J. To Vail

Amention II

Of Society

Ofan Oan have as I think a

immediately

OK

New 27th Shruch

1880

Smit and Rroagen 120 Pedway My Martin, Vaus Buren ask about his about and Character and if he Martin Van Buren Deen 8th, 1800 Care of J. B Smith & Brodger 10120 Browy Ny We are about to engage of a wing of come as inquired if you with to take to position down and here and see Mr Kruedi 9.0.8 OK K Lles 20.

(Dec. 1880) dieses. Balond & Willen Com you recommend us a fixeder Enginer one supple is accommod To fire with Just coal. Oth carly answer will alize gones 125 36,11 T. a. Edison Goo. Winkler No 104 East 1th officel Newsforth Those is an opening in our Shop now if you wish to Take The chance came Exture throw by returne T. a. E per Mra

T. A. EDISON.

We Edsoon We Hoden in considerate whenever to your and co for no for homely outpoon we let him go this week

Or C

Carman: Ofeaso Pay Hidden off.

I have nothing for him to do.

Jas

1880. Edison, T.A. - Family (D-80-015)

This folder contains correspondence and other documents by and about Edison's family. Related material can be found in D-80-040 (Railroad - Port Huron Railway Company).

All the documents have been filmed.

No repotion no answer. De Bradford Jona Jan 18 16/800 I.a. Edia Esq Grar Cousin al I have a few leasure moments and have Just hum reacting about your great invention shought world with auch see of you cause not give me infesograment sourced to pay my board and give me a chaine to Midy Evenings and of other limes when at home as I due poor and course dent are of my time as I would like to about ou year ago I immitted a gase machine for manufacturing gass and took in a partier who agreed to formed the money to get it polinties. and who got polueted in his own secure and there me out and left the country have not hare from him since P.S. Mar Edison Ja Si I wir chefalace my selation to your which is some whom distant this is this for my distance is your first cousing which makes me your serond Causin my diasters diesten name was Henry Edisin who now lives in Carille. I remember seeing your once three or four your ago I was blushing in P.M. Colismo Store at Fout Gratish michigan you do not remember is professy and was some time ego of was very sorry when I havely little Charles Just for he was a smart little

The time is tenting with shorts of evening helder have to close by action for a help me office you four forms again are I stem I can you for in 22 years are I stem I can go as Reas auswer Himas wire come shown Anon of you can give Oddier

Mence Park 1-22 80

Accens from Da Edward

Checks to amount of three

purous and wing fire dollars

Yamush Edward

you may show of plan in Jaw 23" 1880 This letter to al , suppose you got y gor ahou ench you a feron where you gan him the - you think that you a luxusance Reports WP3 seen Down it would for from Just here on Rusty there have we will pay alous Ten Gratust against June wat do as you Think least I send you to day the mientily. Statements for the quanter of November and December of think Thay look Cover for These hard Toines and we paid the Danborn Stato \$ 100000 in Junday last so now we own Them \$ 4000" clace in two year from one to July and if we have good luck we can fruy the aut in much has time and hear the word in Splended Condition I want you to see Uf when he is not very buisy and hand This asports to kine

Fort polar and Jour 23th 1880 Father I suppose you got The letter I sent you a few days ago dant you think that I lend better got you a insurance Eddicy on The men for it would and Cash much we will pay whous \$ 300.00 you Know Rusty Then, have end Protection in Gratist against fine but do as you Think least I send you to day the mintely. It atometer for the months of Sounder and December I think Thay look Could for these hard toines and we "paid the Danborn Estato \$ 100000 in Junday last so now we own Than \$ 4000" clic in two years from mugh July and if we have good buck we can fray the aut in anich less Times and learn the road in Aplended Condition I want you to see Uf where he is not very bursey and hand the orforts to him

and have him pead them gor now It legios to last as though we sought get a Devidend leafon long for if I could send him on I would but no more at present I suffour you are having a good Time of hope Do at least newenter bow to The boys and postedon to higgen ? Buch Than is nothing new cooth conting about to I bige - jon a good Coge Ptrut car Ke for Novy die

my Branch 12th /80 May letter of inquig to you of Oally 14th did not briffians it self as I did not throughteestand who I was adressing. I have this Evening adressed a letter to Won cle Samuel Edison hoping to find other friends and relation, in Conado and Elce where My Name before maniage saughten of som am Flammie Elliste my Husband is a Confunda by toady but with 25 miles from Chicago on forriver on the N.W. R.R.

thoting for your proprity that you may successfully light up the words with your almost one is the out words that I want that your should feel with about firm to answer this lettern to move of the carrier the great fle carrier to recien the great fle carrier to believe the start

Mers et G. Abbottlany Mr Glenny Co Africa Alia Stillwell
194 Haigh GIThemark
The Bury Dolter auth you
When of on come this optimore
The Edwon

/ may 1888)

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Darling & am same to trouble

You had! I am short of Morney
Back & Ram you raise me

Then as Mythan colleges on if

you Rament do that where

Roan I get a Brick Carled

Dispinis at the Office for some as take a Back

Reserve Electric porhord you important reply famil Edin

cine to write you and have you gon Seuralgia medicum Geo is here and he says if you down do you of you Know he is Blind as a box Out he suffers arfuly with pain in the head I wish you would live it by express the Road is doing a good bursuff will send Reports about 5-the Some Wat

Mrs Carson will not be until wearnesday or Raturday

Mrs Eclisen Thirty Dollar Saturday please and in thirty dollars by Bearer; I gave eighteen dollars of the fifty to Wh Or please tile Fred to call here about 12.80 for a parcel to take to Theredo The WISTERN UNION TELEGRAPH COMPANY
THE WISTERN UNION TELEGRAPH COMPANY
THE WISTERN UNION TELEGRAPH COMPANY
THE COURSE TRANSPORT AND ADMITTANT ADMITTANT AND ADMITTANT ADMITTANT AND ADM

1880. Edison, T.A. - Insurance (D-80-016)

This folder contains correspondence and other documents relating to the payment and renewal of Edison's insurance policies.

Approximately one-third of the documents have been filmed. Bills, receipts, and routine correspondence have not been filmed.

MUTUAL BENEFIT LIFE INSURANCE CO., OF NEWARK, N. J. LAMOSE, - - \$35,000,000. SERGER, STATE AGENT FOR JL: Odisen! ade Ruch as newlight. you frequently and been through the mill o lettle or no Compe Louk back and not Court ace le www Istruggled in Hewar awbacko Th. with and am pleased to in altho Dwork as hard as outlook is certainly brighten. would gen like on your life. Bay 7000 of the greatest prosperite

Assets over Eighty-Eight Millions.

The Matual Life Insurance Ca. of New York.

F. S. WINSTON, President.

D. B. RAYMOND, GEN'L AGENT.

Newark, N. & July 25th 1880

Ma Cannan Ex.

Kenlo Park. A. J.

Dearler

Eding fremen, is \$234. To at the pageent

made in Dect losh a dividual of \$95.00

my used in reduction of the formering

This time the Premium is the fixe cit

You has Suremed States of

Assets over Eighty-Eight Millions. atual Like Insurance Co. of New York. Newark, N. J. July 30 1

IA Edward En

Made Fack A J Dear Sir.

Mor faver of the 28th put, genering chape for \$234the senie annual premium a garpling to 163. 075 is of hand; for which please accept my thanks. The reason there is no decidend reduction of the payment, is that The dividend is declared at the accuracy of the Prolicy in December of each year and as you have duy weed the and for the Bayment of the Bect. fremening, the Jenn framenin has to be paid on full.

Your Truly Go BKaymend

1880. Edison, T.A. - Payroll Receipts (D-80-017) [not filmed]

This folder contains payroll receipts for Menlo Park laboratory employees. The Edison National Historic Site also holds an extensive collection of employees time sheets for the period 1873-1931. The time sheets for 1878 have been filled as a representative sample (see Thomas A. Edison Papers, Microfilm Edition, Part J. 17621-876).

1880. Edison, T.A. - Unsolicited Inquiries (D-80-018) [not filmed]

This folder contains unsolicited correspondence requesting agencies for Edison's inventions, inquiring about the purchase or cost of his inventions, or asking for other information about his inventions. Approximately half of this correspondence was sent to Edison in January, following the first successful demonstrations of his electric light system, to request agencies for the light. There is also correspondence regarding offers of land for the Edison Electric Lamp Company factors.

1880. Edison, T.A. - Visitors (D-80-019) [not filmed]

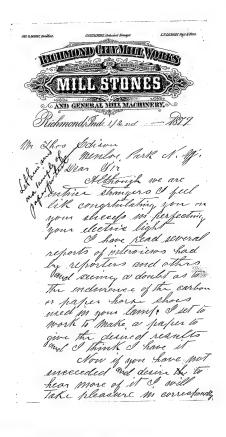
This folder contains routine letters of introduction and requests to visit Edison. Letters that received a significant response by Edison, or that were written by individuals associated with Edison, are filled in their appropriate subject folders.

1880. Electric Light - General (D-80-020)

This folder contains correspondence and other documents relating to the commercial introduction of the electric light and to technical aspects of electric lighting and power, such as the design of lamps and generators and the materials to be used as filaments. Some of the correspondence deals with the lighting plant for Henry Villare's steamship, Columbia, and with the search for cane to be used as lamp filament. Related material about the application of electric power to mining can be found in D-80-032 (kining - General).

All the documents have been filmed except for duplicate copies of selected documents and bills relating to the death of John R. Segredor, whom Edison sent to Cuba to search for filment materials.

home, I am somewhat diffident about Jung to Monto Port As a public Official however I doon to do in and will therefore accept yo Kind invitation and if possible, will visit you to monow afternoon Southeday), With the assurance that will not course you very great



GINE Indian Continue

LTLENOX Sep: 4 Tens.



Richmond Indi

with you in reference to

Her My own satisfacts, of am making, a sample of my paper and I shall gow it to severe trial I will say right here that I am not a partet is willed

I am not a partel mated over the matter don't expect to make any mony out of it Cas I have been in the

lathers of nave been in the lathers of such things but of such thing plant if you can you don't fine the same thing it

whather to mine or not in the wife the

W De Rynehart

It is reported That you obtain in your Lamp globs a vacuum of ross on of are atmosphere, if this vacuum was broken with pure nitrogen gas and the globs exhaused to 1000 ... again, you would have covering to the diffusion energy of each gas oxygon naturally existing in the aw Would not this method be bether Than burning the buygen out by Phosphorus ! which leaves a dan -This gaves residium My Ricky My Ricky N 13 Clark

Aung Stationery and Papen Co.,

of Letter Film and Binders	. 75 FULTON STREET,	
Paper Fasteriers, Parchment Paper, Drafting Paper,	Mr. Olah San and a	
Copying Books and Paper. Paper Ruled and Cut to order.	New York Jarry 2nd 1888	
n 7 151		į
IM JUX Cad	Con	-
Menlo 9	arte. M.J.	_
7 '0.	lion Erk. W.J. Dear Sir	_
4 9	While reading in this mornings	,
1 Trouse	an account of you new Electric Camp, and	
	a obtained you caken from paper it occurred	
Emu	that a paper having a very strong fibre, and all	′
10 el +	le le a printe de la latte mante	
- would	y free from any substance except the regetable	٠,
fibre we	uld be of assistance to you; I therefore order	-
lone /	iced of the heavish might I han a thank, Car	_
from the	margin of the sheet so as by fre from the Chance	4
in car	uling inte. of you disire I can send you some	7
Chuts	as heavy as Prictol Board Prof Chandle of	1
Colum	in College Days this is the only paper he ever	į
	boolutely of pure fibre, and so well washed as	-
. t. L. a.		
<u> </u>	unically of a negation character. very Broke Lours Menton S. Otio.	1
	my reophy cours	ł
	Newton O. Otis.	
		1
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ments Park h espected Sir whow you at time but as I have a - twelve read the numeron that have from time to news Paper Paiss and am that will crown your indefatigable efforts with mich to the world a cheaper

and better light than contind that if you will that now in general use, I beg leave at this june. time to make a suggestion have manufactured a Bristol Board with the himset of Karlin you that puhaps you may be already familiar with you he probably not will surely discords a more herfect and substantial Carbonized shoe. aware that in the manufac. I mile this thinking that - time of Bristol Board they your maid has been so are not in the habit of entirely ingrossed with other using Kaoline, which is as things it may have excepted meally as indistructable as your thoughts. asbeltos, but they use an Opaque Clay, fond in consid morant I would very much like to hear from - erable quantities in your state, and will readily perceive that it is not ab good as Raolin, which is altogether used in the manufactue of Alfred Taylor, the finer grades of paper and in my opinion it is the clay that goes your Carlon shoe its to tomacity, and I Thank him Asay that what are after a a Bristal ba with no Kaolin of other with them the purplies of oxides suchas clay to be all the them to the heart when the

Jan. 3, 1820 .. No 204 18. 11 th St. In J. A. Raison. Junea Park, . I make them william me amonging you greatly; hand within a sex y is with he commind for me to wist you down any this much in reference to the husings how of your discours, Satisfied myples That chatter light will man quickly come in competition with gas in Small as well as in layer soms, I will to organize a ca. in Samirailer 1/5, to control than city and purhaps tent, But I with in the meantion to become of abouty familiar with the working of energ for of the medining to the extent of him ale to her in huter and and we all parts of the offmation. Oungtine V. Y.A. Zaime, La. Som Month chay. 204 B. 110 St. New york wir

ALBERT C.V Importer of German Specialties, 61 BOWERY, cor. Canal St. You Gork, Jany Ht Mr. Thos. a. Edis m Honored Pir. break them off entirely after understand, the greater the amount of perface to the carbon between so much more light and be produced by the processing the perfect of the perfect of the first of the letter and pringing my my anionity.

I am for your most older persons

M. J. Breitenbach

b. Dorreng.

N. Y.

The notches would be absolutely useless as they would macase the surface well-out uccusing the contracting

Part Huron fry 1,111 1880 8.00. Delisan & I have been murting for a lang time for the elister light to be perfectul, Jan my roncember my have an half mile sauth of the bulge. Jan mes dawn mith Pir the lest true gan ones hare I have been ming and thurting of pulling indefended gues mache but from what I read of the Elekus light I I think I ong he able to use it before lang I taled Pitt I mould mite gave and fund and the Propulation



DEPARTMENT OF PUBLIC WORKS.

Bureau of Lamps and Gas,

Room 21, City Hell,

New York, Jany 5th, 18070.

My Dean Sir
I was much pleased or paturday lastwith my trap to Monlo Park, which little Hamlethas now, through you, a world-hide reputation.

Having place much action to the bulgest of
the Staction bight, and having stated eighteen months
bine that I have to like to be Edward take by the
question for I then hoped that you could master it, I
raturally felt much interest in your buces one honce,
I was very much gratified when I forme that you bute
downer of the Eight is an accomplised fact, and that you

failed to do,

I regretted, however, that in consequence of the
Crowd of visitors, I had no opportunity of converging
with you up on the subject of lighting our bontral Porty,
while quantion has been knowned here, I hope that another
opportunit, into be apported me of making you a view when
the through of visitor come freshown you.
The through of visitor come freshown you.
That A Alexandry,

Middle middle but damps of all.

had achieved what other scientists of the world had

DIRECTOR:
ALBERTE. LEDOUX, A. M., Ph. D.,
Oberelet to N.C. Dept. of AgricultureTo N. C. State Goologichi Survey,
—AND—
To the N. C. State Dieard of Health.



W. B. PHILLIPS, Ph. B., J. C. TAYLOR, B. S. A. D. MICKLE.

(1-6)

Chapel Will, N. C., Jan 5th 1880

Prof. Thos. a. Edison, Meulo Parce, org.

Dear Sir,

There is a very large element of absurdity in my attempting to make any an gestims in regard to your experiments on electric light. I may be entirely mistaken in my frances, but if I can't judge from the popular accounts of your experiments, the difficulties under which you labor at present are, first, inability to secure a perfect, absolutely perfect vacuum, and record that the Oxygen which contained in the air which remains in the lamp reacts whom the Carbon ultimately destroying or seriously affecting it If you have not long ago tried it, I would suggest that you fill the lamps before attaching the Strangel frume with some gas possibly litrogen - which will drive out The one- millimette bart, or whatever all the air. may be the proportion, which you are compelled to leave in the lamb, will contain no Oxygen and exert abDIRECTOR:
ALBERT R. LEDOUX, A. M., Ph. D.,
Chemis to N.C. Dapt. of Agriculture
To N. C. State Geological Survey,
—AND—
To the N. C. State Board of Health.



W. B. PHILLIPS, Ph. B., J. C. TAYLOB, B. S. A. D. HICKLE.

(1-5)

Chapel Hill, N.C.,______15____

Solutely no effect when the incombes sent Carbon.
Carbonic acid will not do for this purpose as it is deeon possed by charceral at a red heat, forming Carbonic
Oxide and liberating free Oxygen. Hydrogen will
not do. Stitrogen, without studying the question afeenelly, appears to me most ment and thus best adapt.
ed to the purpose suggested.
If you have long ago made the experiment, blease pardon
my writing. I am one of the fifty millions of
anierican citizens who are interested in your forsent work and have profited by your past inventions.

your respectfully ITEN

A PRINCE OF THE PRIN

Mullock San 6 4 1880. Thomas a. Edison Eng Dear Lin . The question of the best continction of air- pumps for close expansion has come before our, a I dine to avail myself of what has alexady bom dom towner their perfection. Will your he kind wough to inform and of you wake was of only of the published turn found, and of as, and of recent style, when I may west with a discription of of . If the pump employed by you is executially different from them principly known, and then is ar objection, I would be glad to ace it. Could you allow me to do co? Very expect fully yours

would heles what information he Can abtain would like to Mouther Yamed get say 100 Lbs of of Boucht you have the with different twiners Willer and July I notice from the Papers that you use Paper - bard Board - now I suppose this is made from ballow hags - The Pulp for the Paper is produced by Chemicals - Joda Fredin 40 My object in writing is to invite your attackers to what may be a great improvement that is Paper or bard Boald , - or heller the Dulp first to be made of Liveness .. Flax of Linew . Hax (Jeourd not Short) I know the superiorally of Flax we had und to call it " yam " more that 50 years ago- for the Wiels of Fallsen Candles - Thronger light mere delable xo. The value and durability of Paper made from Lineur Hays or Timen blok is instanced by the Bank of Edipland Roles made from Flaven Pulp, sonly If you think it worth with I will engitie at While Faper Mills, where thet John is made, for all the particular I posibly can get.

I think you could have a pulp and bard Born made on purpose, Thate, Thickness , Tite, on as

9.7. Over.

you might require .

the space filled with Water day 12 in difference between letter and Flax o notice than the Pa time use theyor town borists - were I think Shish Flax is considered best this is excelle flow haveling Hand in for the Peter to produce by Cheminal . That be happy to have a line from Beelin See your and hemain my styck on withing it it in insite to what lives to a great in the rows of Stapes on Participales, in wither the other be and of himon . Hay Sugar () of them the superiorder if other west to cale it " Days " new then 30 ; the Mother of Salan bundles - Singer men, darking see. The volue and sardelly if Poper hede Page on towns block it inderent by the Bristant lebel made from Staring Puty ill spa theath it west while I will an the Poper trills, when that roles is much particular or towiet, one yet ..

Piliad Pesa coala Tario a frato la nata coa parposo, Stafa Thaturd S Yau mish ta paires

Could I sue light Him Operation tomorrow.
14 Rooston party want me.
14 look at it for them
14 Kanyer
14 Kanyer

PATENT LAW DEPT.	VENTORS NSTITUTE.	INDUSTRIAL NEWS,
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[3]	TO 138 EHOADWAY,	SALESROOM.
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3	Do Jone Josh, James	1880
16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	John God, James	
138	2 1 1 2 3 1 3	
4 9 8d	V 1/2 4 62 0	
Thomas	A. Edison Esq.	
- Dear Sir:		
As	eientific friend and co	reshordent of
ours has placed i	n our hands a descrip	ation of an
immoved calleng !	Los vans and la transfer	a rate of acc
that during the	for your new lamps, with	in the requests
the same	pending of his carear	we shall sub.
shall some to	you for practical tests	S
If you find whom !	rial, that the inventor	& opinion as to
the value and effi	ciency of his new light	Veliume bod.
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LIBRARY	INVENTORS' INSTITUTE	INDUSTRIAL NEWS.
PATENT LAW DEP'T.	TITOID INSTITUTE.	MUSEUM OF PATENTS.
READING ROOM.	INVENTORS' INSTITUTE.	SALESROOM.
	Now York, and for	
"My in	wention consists in the us	e of a light-
- fiving body	, of any desired shape, comp objecting vulcanized India	osed of Carbon
gutta percha	to hear of a sufficiently h	ich temperatur
to expel there	from, by destructive distillat	ion, all vola.
tile mallers.	The said light giving bod	g after being
within a gla	so wessel of any desired she	spe from
which the ai	e must be exhausted by a	me suitable
means. The	said electrodes must be all	owed to
project beyon	d the sides of the inclosion	- glass
vessel for the	e purpose of enabling then	a to be con:
* meted with	the electrical generator."	
	The state of the s	* ,
	the Invent	
	A	

Albion Jule Works, Birmingham, 8 James 1880 Anyweshall thento Park Lating builder, the Son as. Dear Singo workenwete the We read with much interest the accounts of your gradual perfection of the Electric hight for household purposes, and we hope to be able to oupply wrought oron tubing in large quantities to convey the wires / which will necessarily be required, for this of for the Telephone duly protection her surroundings, instance, making round.

Wetherefine beg to enclose

our price list, which will oken you the class of goods we make and we shall esteen itafavour. of you will inform us, whether you consider that wrought iron will be the best material . to use for the purpose of protecting the wires and also whether any openal fittings would be required as for instance whether the bend or elbows should be of any special pattern, as in that case we shall be glad to know as soon as possible, in order that olepo may be taken, to produce the required arkiele ouccess fully & grackly Prices have risen os rapidly in the Started States that it is possible, even with

the extremely high protective duties that tubes may be imported more cheaply than they can be made in the States , whether this is so or not, we can confidently recommend the greatity of our manufacture and shall be pleased to do business, either in america or England, for the Electric hight or Telephone was apologious for troubling 138 1 0 0 0 10 h you in the matter when you have so mind detail to consider, hoping to facilitate theuse We are your faithfully Lloyd Thloyd

J. S. VAN GILDER, President.

Kinoxville Leather Company,

anoxville, Jenn. Law 10 mento Park n & bype I mote your last spring in relation to some corres pondence on some experiments of blechied + Electrical attractions - So that when you had hime for correspondence I desired to make Some communications of Experies to that I had studied towned rifo to you shell being busy + reasing on your paper theory I make this suggestion to a one as having occured with me a Jemy ears ago I had accumula ted a great many deferent-papers + cards - + in burning sep - I goton to some I could not burn in the

Shove + had to take them out it occured to me of you was to take the barrous cards + segus + advertising carculais + Burning the diferent leanelies your might 8 hihe on some one of the Same I am under the impression it was Some kind of Glasing or coloning that apparently made it in fire proo I remember it well of the bother to get them our of the stone But thought nothing murspeciale of it until your paper theory of michs or remners deferent coloring matter may have produced some chemical Combination + produced the indestructe Respectafully yours Inot lean becolen or amy whopped in

- Edison Coop of the world I am looking forward with great interest to the time when the blutrie light will be available for the Diray perposes of domestic ellumina your recent discoveries in relation to the employment of bard hourd seem at once a supply this great distinction, in its simplest and chewheed form and is I sensenly trust destine I superide all that has gone before it While waters an interesting account of your great discovery , one could heir feel how extremely delicate and grazele this

film of carbon of an iron grey whom The observe of sufficient oxygen & cause ambustin of the thew. had preserved it charred filament must be and Trialmelly in its perfect natural your. but it was began I think as doubtles you trave crist and hard and immensely stanger than mere charred than would be __ done whether there were my easing an experiment could be asely tried at means of otherightening the little horusher and then a made of daing to occurred a gas works. by pulling in the dried & me which I have thought it worth & card prices into the ofter end of the while I sugged for your consideration gas atout and only felling the fore part of the relast with coal . - you will at and I shall only be too pleased it it are see how cheaply and easily this should in your very able hands add definit of curhan court he given to any however slightly & the sences of electric substance of auctoring the article in an lighting . I refer & the deposition of orm fife high ridhet and through which felins of time carbon by invandement coul yes heated as hit blast, was passed. # carburetti lydrosen gas. - Thank and with no loss of gus except the partin seen a large which of Straw which had of earhou actually deposited. been thrown into a ceke-oven . heartifully Other means also suggested themselves such as saturating the cond with solutions of water with an ever polished glistering Silica, casily promable by distolving

the common black flint of the chalk formation in an high pressure boiler with soda, as in Rausanes . Pater Home for which you have a Company in new york - in the manifacture The cardboard fine believe deposited from its tolution by aid and in an excessively Jui state of division could be arrived will the parte and between each that I paper. or Stan pawder. cueld be used and gits fixen under hear toughen the carbon. while the generately present would be for To small & cause the carbon & roften and fall . - had & a passer with so many resources as yourself. There is no need to multiply suggestions, but I know by exhibitione as an inventor how useful it is downtimes to be should of air of truck of thought into some new line, and it is will this hope that I have taken the liberty D. Leggest a matter & you about white Jamismut and which your hand well all you were Jamismus, H. Bernewer.

Pelace Holil. Wellingthe Vondon.
Experiment fair 14 1880. mydear dir one of the multitude who have followed with intento Harles interest your won despil careir bus with perhaps a degree of experience wither becivitudes q invention for. lessed & few I more no ofology for addressing for. The instant the telegroph hough word that in- poper you had found the desired medium I knew this few were right. to me The Confer motion brough of the times

correspondent was not needed for I had at mee Ecognizes that you had his afin the thing I thenk that Lane a bolioble luggestion to mothe . + altho I have less. afortune this eng faith in The succest of a country man of four suy admiration for fru general de character our sides ale + I dend my ideas type for what it was be worth I shake me this if a peice of cardboard of the lequired form and lige lay the Korseshoe for Lave adopted were placed sopidly between two place of glost hot enough to as once carbonizo Ru bafer and weld to each other a laufo of numerous Con.

& effective tomethe thodereed the platinum wires firmy two connection hught he interled with card. yes uncarboneged & being ast were limitareous hubedded in the gloss would he necessary in absoluto Contact the gloss of course to med his think to as to fee heil the needful expansion without with y parties. L sups be findly polished flact or worses with leuxes. so huft be found advisable Law aland worthing painter of Vand teche his dance opens much money & from much attention l' decence. made his for The circumstan

alluded to above . Min long all my copeled . I might now he this way beligrophic Lother inventions whos of andopp to feel for will helinon Denbri Sdeden with forfored respect & colin Thury outs

petroit Lake Superior Copper Co. equiring the frice of amount I upwards of In an adv to feel the one Common Sugar Coffee as absent at the time and the De not equal that directly from the Mineral as produced from the and I found by testing it Load when broken, I think this Coffee was Conduct electricity about as well in heavy has the Cast State as the Common Capper would

Petroit Lake Superior Copper Co.

Houghton, L. S., Mich., drawn int fire fiker, one ein informed that Common Coffee would recrystalize when in Co Enductor of this is a fact of think it would be entirely avoided with the Coffee that I produce

Petnoit Lake Superior Copper Co.

Houghton L. On Micha	18
as the oxygen held in the Metal is the	lement
of Crystillyation, and it rentirely removed	home
this Coffer if all the precautions are observe	
- Converting the matal, All of the impurities	in
Commercial Coffer is Considered inquious	for con-
- ducting electricity, and I think the ox	
- is always present in commercial Ciffer in	
the injurious effects of the other impurities	2 Think
there is a decided preference in certain	brunds
-of Det Coffer for electrical purposes,	but that
and the state of all in all	7
Mearly all of the Lake Coffee Would he	ne a
preference over foreign Coffer Nearly all	of the
dearly all of the Fishe Coffee Would has freference over foreign Coffee Meanly all impurition in Bake Coffee consists of one	of the
freference over foreign Coffer Newly all impurities in Leke Coffer consists of one allower that in foreign Coffer while from	of the
freserve over foreign Coffer Newly, all impurities in Deke Coffer consists of one allower What in foreign Coffer under from above often consists of Assenic Antinony, I	of the
freserve over foreign Coffer Nearly all impurities in Deke Coffer consists of organists of Arenic Antimory of James and from all from the Consists of Arenic Antimory of James and James Antimory of James Consists of Arenic Antimory of Arenic Arenic Antimory of Arenic Arenic Arenic Arenic Arenic Arenic Antimory of Arenic	of the year, and we the Besmath,
frefrence over foreign Coffer Newly, all impurition in Beke Coffer consists of organization of the land from the server of the continuous of Ansenic Amburry, I and Sometimes Beach of finish your so I bloodly be pleased to finish your so	of the syen, and the Bramath,
preference over foreign Coffer Mearly all impurities in De Re Coffer consists of ore Billows What in fereign Coffer wide from above often consists of Associa Statemony of med described by the best of family you so made you make you make you make your and have to make your and have the foreign and have the same when the second or and have the same when the second of the second o	of the year, and me the Bismuth, with any
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freserve over foreign Coffer Newly, all impurities in Beke Coffer consists if organization of organization while from the sound of Ansenic Andrewy, I will sometimes Beach & James Andrewy, I about be fleased to friends you may sometime that I May forest in regard for affectal uses.	of the year, and me the Bismuth, with any
freserve over foreign Coffer Newly, all impurition in Beke Coffer consists of organization of the land from the sound from the love of the continuous Beach & Same Manual by from the Space of partly you as formation that I May forest in report	of the year and the hamath, the any again

OFFICE OF CITY CLERK,

Park of ounce, hus Jan 18:1880, the for was in the lee of all the out of all the out of all the out of and the left of and the left of and the left of the land the left of the land the left of the land of the land

Grifoenda Relinin Philo Jan 18.1881
Min Edism Dearli I see by this mornings papers exous lamps (1) po of the mirrange purposepour camps
We visiting it special seems of thom
is petun tillet I think I can help afour out
of your difficulty as I am a practical blass bloves
and mildretand the manafacturing of the
material of what your tamps are made of Bespectfully yours Bustin Danney 822 adams of Thiles

My Jany 16, 80 Situalità o Jany 29 Canga fushape Canga from 91. Na71 Broway Sany 16". 1880 Prof. Edicon, My sear sin, Reading in to-

dury papers de some trouble with your glass glober the idea has come to one that frethals Muca can be need to advantage. I be live that it does not contact or repaid made the influence of vilter heat or cold,

I become of no means of form ing wheels of hinca to meet your was but trulet to your inquisity to find them.

I can only any that I shall be blaced to give for if you wish them, some short of clear mice of and strickness that you may be obleto nife them, while you find the thinks up in the to meet a presence of 14th to the 11, inch.

Mica, I can furnish you with all you with you are clear of so clear of transfarent a mature as to amount your furnishes from the add that Messe Doney & Robinson of OI B' way blowe seen large of waich of femants of the suina of who, havil send your some, if you desire,

New York, James 16th Thomas A Edison By. Sir A material (Silica) for mixing glass is found at Solden, Colorado for -Loughness and strength, no other substance has been found to Eyreat it _ Samples of the rough blass are in this city -The Glass works here, have testitud it It might answer to make the Globes, on Lamps for The Elethia Light You Oht Sement all glass is made from Sil Gondell & son deflet quality 645 Broading

SOFFICE OF≪

Thomas P. Hughes,

Plumbing Gas Fitting,

We will will through flere to the 1890 We will to the throught of the plans what of the throught of the plans what of the throught of the plans of the throught of the plans of the throught of the plans when the throught of the plans of the throught of the plans of the throught of the throught of the plans o

OFFICE OF GEO. S. EATON. Manufacturer of all kinds of METAL MOULDINGS,

AND FLEXIBLE METALLIC OIL CLOTH BINDING

14 DUNHAM PLACE. Near Broadway,

Brooklyn, E. D., Jan 16

Ediovni Dear Sri:
To amedy me gloss from breakage, more in me geste before execusting and Beceling enough

and alt as a Classifier in sequetaining

the hear. All vapor or dearn formed during the night,

Condinne during The deep orher and

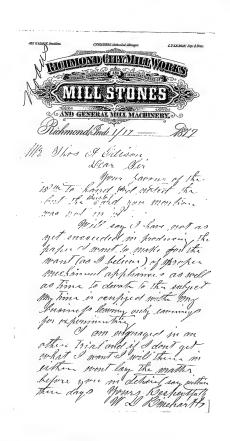
Water boils in a Vacuum.

Having origed thread fact sprawid post night to that Gould to day bonized with good it Lava files Idonat know any this that made as fine a fire as doal, burned to very part if this is the word

to use, asher Thomas be peak of a more fibrous hatura would assure the purpose batter. Iranember some experimento in chaland with dompressed peak for getting up stand in angene or toilers behould say when it were found that with it, I town good to och up in little more than half the time required by anof domburtitle then and Whether this maghan any bearing in the matter, my want of aksmiant or saisatifia knowledge -presents me from knowing. traving and said read of your of perimento with interest thappened to think of post, and think it and do no harm't mention it to good, although for tately good have tried of Law imployed in Korfamble's office in a clerical position, but have no known ladge of talagraphy or the workings of cleationity, further that what there

gethered from occasional reading. Previous to leaving New york lives always employed in a Barking of Courting House Concention The apology, last what Shave written in the post marker may not be sois , in a saisotifia way! had the pleasure of dring introduced to you when you tivited San Faraisdo, but of donesa g would not some der on Bro Crevact of the W. H. Jal. Ea is a friend of mino Thould my supportion be of any - planed

Moento Partifan. 17 180 Messes Everding & Jon Ks Tharm the Remare Cany Ponter on Procese be so thind 20 To heep me well posted on the results of the experiments & tests of your Asam generator. I our at the present time higher interested upon the send generators & origines in regard to the highest thank the send to the highest the highest the send to the highest Trey information or Description of Dotails of the goverates & engine you may be inclined to give Bispostfully



Ancago Jany 18 of Mariento are primp to the Eddies of the people of the

Abricato for 18 18551.

The induser Cias Six Share receiling the instrument of the share receiling the share and the share and the share should able to the share should be share further than the share should be share for the share fred the share for the proper of have been received a further share the share of hundred of people, many of the second of brough frinciple of the share should of the city selved of the share and the share of the state safe should of the city selved of the share of this, and his approach to while shoots of this, and his approach as well

as Dr Pikes a Secentist of this city who all attinouncedge that

Frein and de presdave a perfecil-Memin with My Valveless hamp Now it has been juggested that il might be aseful to you in connection with your dechie Right, - If such is the case and have have any we for it, it would abford the great picasure to furnish now with an apparatus, or infor-Mulion Musipary to its construction Believe In I am pramplest by no atter motive than a desire to axist - in the advancement of seine in thus writing you, for, should I be priviledald to provide you with my puny I desire to do so as a present and not otherwise Should be pleased to hear from you at an early date; Mustil such time I shall scanain as over your admires and friend 1 11 Powers 274 Julton St Chicago

Phila Pa Tany 19 50 Parls fan 19 15 1880. a Gausder vation of glas, Lam able nation in regard to making the the glass charable & expensive of a method which proces the glass, so that, if it has with water, it will not built, at least very solder. to see there my two mellodes or one of them, after having

loving and attend of O Tanscher and he was to some and to the sales and the comment of the sales and the sales are M West from My Se Geo Cayn minle ? dena haper Several Prins -it- regres Is about 1- make a an ensidera

am able to shim. one Most will do. be blised to here mork and in lus. Il Min any appointuities mon willfa that frefance. If you diric me would by plyind in moletur me the Capacio 1 Mit purup you region for your millhore, I will asker to build you ane familie a growthe What it will be for Superier to my have mike, only constitut the for my dring use, I have Muffer Simething entrete difficult and ext & thing Stul & Rome from in-princing it it for Empire

T. A. EDISON, By presenting this no will receive a ticket to New Brunswick or is they have them, to men Park. I will furnish the return ticket, Verytruly Presented to

Pro While They M &

Hautical Almanac Office, Australia Havy Department, Will australia 192 1879.

Oly Dear Sir,

of wish to make one suggestion respecting the carbon
electric light. If I undereland the case correctly a
carlon conductor give much
kee light than a platinum
one with the same point
and resistance. Yes of
Jo this not owing to a want
of solidity in the carbon
and to its hetrogeneous
teritime? Ellay it not be
that if you could give a

fin of carbon the most added textitive possibles, you would get a great deal more light from it? I do not know whether the expreriment is practicable but merely suggest something of the soft to you.

Think there is a very, great obstacle in setting up our relicity of light

apparatus at Menton

Park owing to the want

house where the operators can live and sleep.

of a hotel or boarding

Otherwise I should like very much to accept your that offer as I think the advantages of your lateratory would be very great. I suppose we shall be ready in a couple of months.

Simon Neuroush

Thomas Of Belison; Esq. Other Pack, Other Jersey. GEO. H. LEVIS,

I would blee glasher franch franch to a problem of the following the formal with the following the following the following the following for the following face now in specialist in Brather more for the formal for the following face now in made to stand the stand the stand the stand the stand of freeent we are amount than the following of any week to form any of any week to form any trayer both dependents the factory write for the factory write for the factory write for the factory write for the factory winter for the factory write for the factory winter for the factory with the factory winter for the factory with the fac

20.186 four times soon after the lamps wen Would not a few dates of - brakage the glass, or by the

WINDOW GLASS, WHITE, GREEN AND BLACK OLASSWARS,

GLASS BROKER,

Chiass Zamp Chimneys, Tanca Warn, TUMBLERS AND GOBLETS,

OFFICE, No. 3 SMITHFIELD SPREET,

UNDUSTO ALLU UUDASIS,
PRIVATE MOULDS,
AND ALL NEW ARTICLES.

Dittolurgh, Pa Tenny Lo 1580

10 ALL NEW ARTICLES.

SET | advance my interests by securing you every advantage in polon, quality, and prompt silymeds of goods purchased through my. No charge to the looper. Information by Mail or Telegraph cheeridity furnished.

Awing rew in the News Paper Some items pelating to the difficulties you have Encountered in Consequences of the Class Glober breaking on account of the offension of the server of the Good of Concluded to write you to say that I find I Can put just on the track of getting ylobs male of a quality of glass that the twoodle sould be as many orners as is

possible, in my openion bused

25 year offerince in glass Making

there is but on Amid of glass that

Can be pelied on for your p

WILDOW GLAB!

WHEN PARK AND BLASS DE COMPINIOSTE,

CHAST AND SCAR DE COMPINION DE C

Sample with wire in Warm as

Our soll tooks at the flack

. Jany ny als w jelly 1

wift efor send me one of mz ej ezani Iezans werés iem for nos Thu amsat

Pan. 22, 1880. J. a. Edison, Erry. Ments Park, A. D. Sousie: In response 15 your inquiry about the count of water from this place, I Send you with this an illus paper which will give you free destails Bealers upon Mi. Goddard the night morning after Seeing you and mode application regarding Holyohin, as you the

Knayville Jenn Jan 23 1880 Thomas a. Edison Thankhing his infor mence Park n. J. Dofi . Gotter, y I notice by papers you have some trou . a our Glass Burners - or lamps - I manufach by ears - 4 in Moto Have - + haded in Glass some so years Hence - allow me to make some seeg gestions - that may be of some service to you in reference to them First-for your purpose - the material in ivery part-must Lee perfectly peure - tall through its process - any Sand 3 pech on from the Crucible . in it will cause into crack by sudden changes of hear or cold -The 3 hongite of Glass is in the enamel - The mouth of your Ralls must be thoroughly anneal - tyour Ralls also showing by tempered - give them after made through Very sering in an oven to retrein strangth after this take into consideration - if any heat mide you much protect outside to make a succefts La do So- make a Seconed larger- Ball in case of Glaff - + let it come down over - your first-nike a shoulder on stand around below your first and let it have small air holes-only-in the base-this will protect - your first - from sudden current of heat + cold + not effect your light - by being of uniform Circumference of the Globes to your first-If much heat is acted on the first is might be necessary to have a very small opening in top of 2 " (but small) Ugan - 15 make it practical + permanent

On the steet - you then place the Live into the ordi many Exas lamps as used on the shalf- lopentect the Livo - Jam the various nearles - knowing so well the materie of Glass - I give make this suggestion for your consideration - and think you meefind something dimilar mile be necessary to ensure stability ingoing Elobes - + no Blobe used that is not pine of imperfection + also of even thickness - a thick side tathing one mile not be reliable - and a peur light can only be protec ted in the general manner herein indicated and it will be an easy matter for you to lest in come parison to your others - Respectfully yours Inos leankilden

Men Heaven of that unfortunite class inventors I have taken a deep interest in the success of your labors on the electric light From nevspaper reports obstacles seem yet to exist to its practical Success Several Times within a few months the impulse has come over me to write and offer a seggestion to you without regard to taking the risk of seeming presumptions Without stopping to explain difficulties as lunder - stand whether correct or not I offer a suggestion based whom

experience in building furnaces subjected to intense fire and where fice buck of the best quality were of no wait for any considerable length of time To get rid of the difficulty I used a five stone which can be had from two localities in the country and is cabable of withstanding any and of heat which can be produced for an indefinite period of time It has occurred to me that this refractory material might be used either alone or in combination with other materials to take the place of paper costons if it has the proper : conducting hower If not powdered it might be mixed with other meterals to give This At all events it would

cost but little to try it Previoully heated to a high temperature and afterward and afternand mixed with fere clay the mixture is infusible Downdered Spirity Platinum Mixed with this stone and fire clay might do it or carbon clay and Stone might ousur or a carbon pencil surrounded by clay and rock to protect from the action of oxygen if not in vacuo or in an atmosphere of netrogen Several other suggestions have occurred which I will not stop to outline Some of these things may be good for any thing trial alone trial alone must decide but if I were trying to solve such a problem should your them a test as it can te done greeothly and

cheaply It what outlined is not good some hend inight come of the trial that would give the key of the difficulty you may have traversen this field dready I know not If so this will only cost the time of reading and can do no other harm themist, applied to the arts has been my specialty and I have learned some facts therein unknown to others If you should see for to make any inquiries they will receive attention Mishing you ducess I remai Respectfully yours 187 Temple So

1880 86 the 19mp WINDOW GLASS, ppincott, ITE, GREEN AND BLACK GLASSWABE, Tanen Wans, OFFICE, No. (3) Sale TUMBLERS AND GOBLETS PRIVATE MOULDS, Pittsburgh, Da.

fak Boshu for ye after large

Swarthmore College.

SWARTHMORE, DEL. Co. PA.

1 St No. 24 H, 1880

J. S. Edison; Esterned friend;

for the fourties right to my pen ande inguises as to the district required for the free when the surface of the free from the form to the form the

times of "decentrate", and Main somplet infurction of subdesparts developed the money that und part considerable with their fine Maines, might make them somewhat purchast profit of Maines of Mathematical from somewhat with the Madament condition of scentific Humbage, must be largely determined by upper must and observation.

qwelook Lilenoons Senes & Edisa Jane litte

For anything who ho a 29 m/ Machandy memales To altanh a Torricellion Vacuum much & can do. I use merciny My aprigion to out-farmeded This appointer is, much more thinkle check and Murable Mon only man in pre This fis a greatwhich I have kently face full- fir my own whe, as som las If fruit this one Mill offhy for letter mich consider it sulevent to replaced agent Respect Geo bluk

In hassing thetore Park about 1045 ple a large number of historyers have need of your lighter be to our know that we go wwwy when your it a great many horages from to south and I take pleasure to show them both may so and is blesses themin any mutch on 8 tuty my le I have a good Time and I gas them agof a see the light bis no lightming sothy war fooled so I shad to go wo long one will respense the son Edwarge hirt gom to bed and blowing his light some say o contract when one you giveny no taffy in going day he my time of time some of them pure it to one they said their comes Enter ...

Some Said Tom low is your lighton the main me med and his hearing one a little all fine los a angle ! betypochen to brown if the left to be some of the left for the benging how my mutched heard I have Jun place in 5-45 All in the morning all it mes all of this moning me love a good ene of for I to the tour to insure hours as mule as 8 layers more mulitie to but the Edward lighter Boats is a by much among the as you higher loud; The leading and I hope you may Diccade Your Toly J. E. Lice Cande clan right mid to

Glass Company of Ame 120 BROADWAY, Corner of Goder Street I am confident I can make some suc gestions regarding the glass portion of your + in preserving the vacuum that would to you; ou presentation of these your could lest a + thus be able to cover their use by potent on you Lamp; Should these suggestions be m Successful in accomplishing your an give me as a recompense, day index finger to point the The De La Bactio for Oil tempering / proces super heater Steam processo, for auxente rtion of your lamp is sufficient inece relate to the caned to wires pass to the inside of globe, and is, as understand, the weak portion of your lamp, when the glass proves defective from cracks caused by expan

of the wire, in heating -My addiety is (for a few days) New york city Port office. formary with the Coment association, Louisville, Ky, and There of the Plate Ref C. at Jeffermindle, Ind

y2011800 hem of electric lighting at the . the during the light in the State of Pennsylvania, these men pur the from Sight lear py haw york, I have believed by have york, I have be some form of his refer has been required to the matter proper and his refer have been been about the perfect of the product of the perfect has given the perfect has given the perfect has given by the perfect has a sight much more product product perfect perfect perfect have produced the product have produced to the perfect have been perfect have been perfect have been perfect to the perfect have been perfec

effort might be betwo or evalle than your bailed based, but it seems would trying.

James very truly

Simon Newsons

Washington, B. E., Jan 28, 1880 Thomas A Edison Esq My Dear Lix you do not seem to have eaught my idea about the electric light. It was not to me platimen, but some form of carbon of metallic sali dity and compentures, should such he former. It might do as well to tay catton filese numing The whole length of your lock shoe. That is, take-cation stuff, count it aut put the files togethe into a west of the night length, and bake That The

The Edison Speaking Phonograph Co.

GRANDER OF HYDRAGO.

THOMAS FRICTION.

THOMAS FRICTION.

P. O. BOX SHOW OF WILL FOR J. 25 1880

My Sear C.

A Closed you

will see ther some best are raising many here on strength of him right for your light you weight

Because The Edin Lelephine is being run here as a till to the Bell ice, They Trunk the light much be a till to ome Tring - of the Asy conetties in so a till to danger!!!!

I have some of the herr men here ready to fur uf money on work in him down to me the Co word me make my purious yet.

I hear than there beets have a license or morning of one from a

The Edison Speaking Phonograph Co.

ARDMER O. HUBDARD.
Wer Praident.
HOMBAR A. EDIBON.
Britishing of Transpers,
E. H. JOHEGON P. O. BOX 2702. 2 New York,

man atto nome) for who says he has originated through a Jungton piers.

of you have no some so some you write to les of water of they will les you know when they reneely to anter for wash'n -

In 4 Hariza

The Edison Speaking Phonograph Co.

P. O. BOX 2702.



Antional Republican

THE NATIONAL REPUBLICAN



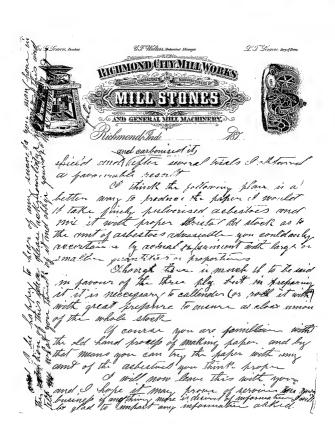
ELECTRIC LIGHT AND ELECTRIC LIGHT
STOCKS.
While Edison has been spreading himself





Mr. Mrs A Ledison Marke Mark W. J.

As I promised I will pour que you a report on My infummento in making paper for electric lights without going misto details no to my on personents which have been of ench a nature as to prove to My self that it is practical but in brief my hapen was made in this way I procured some asterdar a paper They wert somewhat pulped I the placed The restoclared between the sheets of the printale if and subjected them to present while of so it cooksesson that the product was not solich mongh our are other trial of proped the passon for (some pulp the ply I between salls which gave better results yet of chidnet have prefaire mongh in the rolls to propperly solidize the paper I then placed the paper in a clay matrix or



Fitch hurg Man fan Ja. Edison Eng Mento Cank M. J. Mour foror of the 23 as king Sor reducing notion the indicator lame duly to hipsad, and allowed have him answored before Our wood norkmin have been very busy or me would have had my made as for at not find them in Borton we rend you the only me we have which has bur were fet twice, rather than to actay long enough to make you a better in To you nish to use a while to efferiment then return, or to keep it! Jugar mich to keep our me mies make a niew in and exchanging you disve. Tresums you fally understand how to use it. war the us know and me vice rend sketch and instructions Respect Yours CH. Brown 16.

New York, January 301h of Jam 24th is seeined will excuse my reps. The Silina formal at Bilden, Edwards. The substance. Beenish tint, Similar to the Bothemian with toughness, and Strength. The Dittsburgh Glass works have used it. I formed by useing two Hobes. Her the Electric light or lamp. The Order one postiets the immer and so a sure Bearintie against excelling This is patentaked Respectfully

Ypsilanti, Mich Jaus 1,880 Na Edson Ey Daws on Sust arrived home of Eastern Frip, this Evening having beauty gone longer than I arrive plat when I know me look over the stock

to submit the following for your Firstly in relation to the speed of the Julley on the generator about 8,00 per minust know, again instead of punning with bether bette from a counter shape, I people to run with

O's the driving fictional July on the . Sugine Thats. I is an intermediate acting as a tighten -er or clutch, to throw alynamis off or on, as the case many require A the Julley on the Dyhamo If then is any thing to present me doing is please vadrice me; for I thou is any danger of the current Leing carried off thirtugh the pully to the man shape I can interpr

OREGON RAILWAY AND NAVIGATION COMPANY, a amonduction Setween Synams ricining the

1

The yellow line showing the fine brass wire supporting lamp

A being an opal shade outside of the lamps

the lamp.

× being a cretal deflector and hear protector for the ceiling carrying the opal shade, and will broker holding the lamp, and screwed up to the ceiling bolid. In the other cooms I will fait an ordinary gas bracket with globe. For that if you can oblige me with a lamp (a Borken one with do) to fit to it will oblige and help me along counterably, also will coul cupply the pockets to drop the lamps into or will I get them

OREGON RAILWAY AND NAVIGATION COMPANY,

PRESIDENT'S OFFICE,

20 Nassau Street. Room 24,

New York,_____1

made out of wood myself. also will take the man wires from the aynamo's and twist them into a cable and them branch of from themes by the circus wires there

with a finited on every circuit, and a test lamp between the main cables. for the ingineer to control them by or will I use a 'h' dia copper code inotead of twisting them togethes and lastly what a trual House prover will I provide to cum the four dynamos with. I don't

think from what I saw that each one ought to take once Than two H.P. which would make eight but twelve I think should be all dufficient. color if you will let me know the harty that is building the dynamos for us I will send the Justion Skulley's for them. Or husting of will excuse one for this long account 1 Neman du St Gengi Hotel Philadelphia f. C. Winderson O. A. HONGO P.S. if it will buit you better I will come up for your answers to the different things of you drop me a protect to that effects

File 29 8

T. A. EDISON, Menlo Park, N. J., Felry 20 1880. an inch of Each will do by Express to a rove address (D) Carman

receter Mass. \$ 26. 2, 1880 -Fran Sin- I have ress the description of your Electric Light in Scribner's Magazine for February. a perfect vacuum Jonicellis I may be produced by filling the Timertea lamp of through the like, F. which must of course a more than 39 inches long - (See Fig. 8, 1. 537) If the carbon horse shoe, L, is not strong enough, it may a confice in time foil; which will be multed by the first current. Please notify me if this suggestion has value your truly, APMarble.

Thomas N. Edison Eas. Meulo Park A.J. the liberty I take in consuming a mon of your valuable time. Reading last evening Un. Witon minor description of you char and lu elictric light, two enguetines occurs to me which an impulse fromfit in to lay before you. They are so very simple that I hardly wenter thetate them, as they are so likely to have be First, to overcome the annoying and mechanial difficult of the cracking of the glass through which the flater would suggest that, instead of francing the wire through the glass, a small brake cylinder or take

be passed through the glass, this cylinder hoving a thin wall and an interior bore possibly not exceeding an eighth of an inch diameter; if hugered its exterior surface night be corrugated & make more secure the union of the glass. The pass The platinum wire through the centre of this tibe and close in a suitable manner by a "non-air-conducting" material the outer end. The air word being exhauted from the globe and tube the exhauting and contracting platinum wire should how no effect whom the glass. To prevent the wire from touching the brass or even slightly hating it a packing of ashistor, plaster of hours or center of similar non-hat conducting "externe might be interposal. Or, by mans of serin-caps on the evolog the tabe

any R. Smith, (2) T. S. E. D. Office of DIXON & SMITH,

PATENT ATTORNEYS,
COMMER LA SALLE AND MADISON STERRES,
ROCKER 43 2016 45 Major Block,

this packing might possibly be brought under such preserve as to be itself, now an conducting also, in spile of the alternate experience and contraction of the platinum view. I proposely beauth the suggestion incomplete as to the mount of closing the courts and the class remained from the problem and the class spine of the best among a large variety metric.

Nelster to the production of a vacuum in the globe.

In my college day a formation of choice and I become around a formation of May suggestion to that formation to forthering a machine or the global

it be filled with chlorine. This hong gos will really displace the air. Then exhaust the chloring and however imperfect the vacuum no harm can result, as mutter charcal, diamond nor plusting, provided they be foure, are affected by chloring. They do not combin with it and may be hat in it to white without undergoing any altration." Register cannot directly with with chlorin, which is not true of mitrogen or any other gas, although chlorin sufferts the combustion of other substances. The principal function of the vaccions would then his to prevent the radiation of hint & the globe. This process of producing a vacan for your purpose is closely protectelly this purpose in this relation before, as

v R. Serre,

OWNER S

DIXON & SMITH,

PATENT ATTONBYS,

CHOSE LA SALEA MARRON STREEN,

no other gas has its preculiar properties Carbon also heated in chlorine count change with the form of graphit. Possibly an advantage would be going by writing the platinum to the ordinar wires within a small supplementory globe or bull filled with chloring, when if the interior passage became imperfect no handworld really and of the exterior hasing over injured the order would attract time attitude In the exterior purage then world be but slight expansion and contraction. I have not "reduced to practice" any of their incomplete Roggestions, mor shall I. The law was settled in the Supreme Court, in the case of Prog. Moras that a distinguished inventor laboury in the fill of scientific research is at liberty to avoid himself of suggestions and conveil from every grante without impairing his right as an. inventor. And the fact that Mercie sought and obtained the necessary and act I upon it with impairs his right as an inventor wordetract four himsel" Of course this little is confidential on my part, and while I connot expect that the augustions made are of any I hues that this litter, in spirit in which it is written, will not be regarded as an inferting

O.CORNWELL, PRES.

The Epsilanti Laper Company.

c Rend of Aux Exp. a sample of wood to find ont if this material will make the Cartons gow regime. I will have to make come changes } in the mading to make the organs thickness and finish. If this material is any better than Bristol Board or other materal you Vise . (I can only Expenset on Sundays is we un so crowded with other orders,) I will my and make the paper you Propries. let me hear firm you comas: &

Holyohre Mars. Grarlii: Jours of L' with seed & paper Sent Mr. Galdard ___ I Shall be placed Thend you gas Statistics; but, can do de more Satisfactoriles for both of us, if you will State the points you with them to cover as we lawyers Day give me a bice of particulars. Want the Capital slothy tay two yours Not of 1000 feet yes said yearly price for 1000 to bund artage Comments. your singleyed in gas with grown or the proof of

T. EdismMentsparts,
Me Starbuers will
dale upon you tomorrow
in my publif in regard
to European Stocks

15 paid
North

Drawlind Melso
TA Edison
Meulo RK

Can you per my
Starburk in regard to
the smatter about which
is telegraphed you yesterday
if he come out
on the one odock train
25 pair
The pair Dragon Stan Mangatin G

Some days since in relation to annealing some of your glober, if the proposition Contained in my letter Bro 18th Satisfactory to you tohat Frouldo be? Greatly think I can be of Service in the matter proposed

GEO. H. LEVIS, 402 Locust St. Philadelphia, Jany 31 1880 J. A. Edison Eg Mr Hm Speryunto on the soll concerning on process for amealing klass you replied primpetty in the 28? would take practically for four to permit as to anneal Six of your globes - our proces to a certain Extent closes away with the brittle nature of the blass If me can de the globes be can then be that help for Let is descrious to push it send them tratine address stone Gens Very Into Geo. St. Levil

Broklyn & J. Fit 9th/1840. Mr. Edison In our ready for your experience for Steel my transace is reall for much seek to much I writtle Like to be you by Hetway if Comencul at Member last mich for an early reply. y Yates are Brothlyn

of Unssin Inf you can w suggest referring him to the scribnes article & Wice admiral - Pestohonroff, reguests me by a letter of which I have the honor to enclose a translation, to give him particulars on four last remarkable invention in the ophers of blective Light .- not being competent impelf to treat the subject, and not vishing to give over trully mismet information, - should I take them out of the Local Newspopers - I take the Liberty to apply to you hoping that me of your secretaries may forward to me, the positive Memonts of on onever to the admiral's injunity Phase to Stoner to be Tur si To Mr. Edison very respect fully Mon lo Park Consul Lineral Translation of a letter addressed by Vice abmiral Petterhouseff Tweedor on the Emp! Aussian Ministry of the nory to It do Kartchusky - loud General of Aussia in New York.

Dear Sir.

Many of the General house published lately several articles that some Direct have published lately several articles that a happy and remarkable solution by Mr. Edison of the public of applying the electric light, for the illustration of the Many affects the highest importance to the greater's relative to the literary of the Many affects the highest importance to the questions relative to the licitive light, but not know ing what in the Numepaper articles must be accepted as real troths, I hay to address myself to four lexal long, requesting you to inform one in what concerts they last of me believes remarkable inventions - in the appear of between light.

Augustently (signal) Partchountly Myg THEAR OF 3 Morcegorh Feler 10/1 mi William too see to converse with me in regard by your mother soonache is able will talto with himo an difficulty what we will do in This caticalatory



P.O.Box,4689.

The TA. Edison Eg.

Dear Sir: In regard to the aumplear of annealed glass which you recently lected bund found ansatisfactory, the part, who furnished the samples states that he was not aware for what they were intended, and that they, were of a poor quality. He is confident that he can produce a

glass sufficiently tough to answer the purpose. If you strink it worth while, please send one a few of your globes, and I will forward them to him poor to prepare them for your lests.

Lennele M. Derrell Winckney Themas St. Edison Esq. Dear So.,

I am a glass mannfacturer and have a

great deal of experience in combining glass with

metal, and reading in the papers, that you steet is

lamps are orassing in the papers, that you steet is

lamps are orassing from each imperfect combination

and being all be give you some valuable advisor for
the more paper tendenotion of the same, I therefore lash
the liberty be offer you my services for linch properse.

Very respectfully

Grundoms, Tel 13 - 1860.

C Hainer northamplon J. A. Edison & Dear Jer I have been to the Paper Mills and have secured the necessary information and Samples of their make which is the best in the Hingdon as the oneto for the Bank of England and the Garrennent Postage Hamps . The sample Sheet of Bank Role Paper is all what they call "Strong" all best Liver, that Thut if Jul flat through the Trandle of a 56 to weight must both ends at top and cherch the paper in one hand with lift the wight without enjury The paper at all, They can chatte that to any thickness you may require in Theets of any Sive orders they could be cool at your end to suit _ The theets could be ordered so as becal a certain number without waste all their Paper is Nand Mide by ordering Large Theretz less openie, - as a smile Theek is just as much labour at through as a laye one. There is no Mineral or any other substance or nutte whatever in the make of any of their Report The Royal is kinked with best Imskie Yolur" _ The Bente hote Paper Lines is washed with feer water not a particle of Yoda. In it is thus the "Strong Paper is all Linen

and nothing ested in the Grending or bushing from togething to easy but a contained spraging in these water under the Fulf Eccount in apparism like water think the Will surely for the May, and Super.

"The exemple That "Proyal" is the best May that for Extges "Mat has been "Glasset" nothing put upon it. Jamba, localist behaves bursted the Inflore placks "If you with whealth you wish it. I would you wish it. I would you wish it with a fact of about the trans of charges to Jovensoned. That is the vary best devices "Hough the world come semething writer Yhpout the save of the Matter while is a fifteeness the larger the charges the labour. I think to far though the same of the fact of the world with the fact of the same that it is a fifteeness the larger the charges left labour. I should hay the fact of it devices a successful the fact of it devices a successful the same that it is a successful to the fact of the fact

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vides much the Books were to i much in the thouse or necessary to the second with the second with the second with the second the seco

when I get it will write particulars.

May what effect valurating your hard in mall langur and hun gradually dry it before blazery and any or any Hrong acid Gurs Respectfully

D.S. Your borrespondent is an Old Man yn quar of ago on the 17 of March nest. 1880. Il Patrust Day Day

Corner Madison. Chicago, Neb. 14 1880 Gold alloys Easely Dear Jr. A thing was trought to my notice yesterday which it occurred to me might interest you in connection with your conton horseshor, It was a relie from the "great fire" in the shape of a shoot of cotton, The cotton nor completely chaned, but the shool was charred still more, so that it could be mind mide of the cotton. I thought you might possibly denne a kint from it, which would be of value to you, In reading some him since of your experiments with platinum. I was reminded of a fact in regard

to platinum, that I had long been consessant with, In making sets of artificial teeth, ou platimus, and covering it with porcelain, when soldering the platinum I use have gold. and find that in baking the porcelais at a temperature of 2500 to 2000, all traces of the gold disappear into the plate, and it is estonishing what are amount of gold will their be absorted by the former metal about my that it mend not be see dence a to usually supported,

Bondon, 4.**G**loak **L**ane, E.C. **Atlle, 212, Rue de Puris**. RIBION TOBE WORKS,

Birmingham, Tel. 16. 1880.

Meulo Park. N. J.

J. a. Edison Eye.

Sea Li

We are much oblight for pour hote of 2 which read be quite les that the present time is too saily for you to say anything about time loutrant, but he beatens to trope. That when the proper time arriver you will not found our application, and will favor in with come toppentions, which we shall select the an hour in tracents.

We are.

Enus Truly Kloyd Mayd. Brooklyni will reabout weeks Letter materie - Carbon Horse shows - you were using for at that time, was prepared to submit it. will be at Laboratory (Flesh odocio Pina execimens for Tral to meet gon who that

I fon chomed he smake to be the the two with Jon please thomph we do the spend with me the gentleman who prime the good hearing ledges in Water Co. He was to my formal tries of some they was to my formal tries and the sound the sound hearing ledges in Water Co. He was to my formal tries.

New York Files 24 1990
The Buckeye Engine Company,
The Buckeye Engine Company,
To Those of Galasse State of the State St

lutely studying our the poin ciples an which electric lefts very depends and devicing a system of applying them The result is that I have his whoma place which is far as I keeper, is new list which will require a good deal of experimenting woods

should have acce half the To determine whether it is pateur night, of new and practicable, and how it Caharious additional conmay best be carried out. trivames are required you are in a valley better they I to have one Their, Coudition their I am for always supporing, of course, such tains, and I am willing that my peapared system therefore to turn over to is the one used. what mater to you for If the terus and what it may be would. acceptato to you, let me Perhaps a few arraws Kusa, and I will folivered rout would be that if Man complete description any of my our plans are duel explaciation, with seines ful without way great modification I description of several pater

tatilis faveus some which you might be "alle to try within 24 Ration on a women at Mains very truly 3 The face whether HAREAND KING institute 2 grave there firement with freel houseman THE THEN HETE SOLVERY TON and capter water a with Compation of Section & Porten

Rautical Almanac Office,

Washington, B. B. Jelly 25, 1880

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Thomas Abdion.

THE WESTERN UNION TELEGRAPH COMPANY

The Control of the Co

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light and current by Brackets

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and as used for lettering med.

Mr Matto (Feb. 1980) Oes adress this race & write to J. C. Henderson Super. Engine O. 12. & N. Co Send by mail to right - Traving of Dynamio mass. adress It Goorge thatel Philadelphia

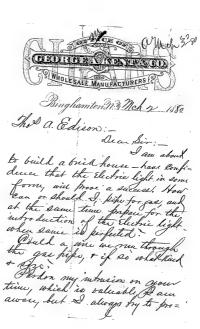
250 Horse Figure proposed to be 1. What is the highest advantageous speed of Engine, that is number of revol per min -2. What is the diam and face of Bandroheel- supposed 10 A dian 30 "face -3. What is the siston speed -4. What is the Stew pressure Mill Leak dissertions from Your four forwards for general Somework. 6. Could a less wide belt ou larger Fram Bantroheel be adopted without affecting the con Traction of engine

(Feb. 1880) order for chemicals. Salt peter Bora

Hoboken mar 2d eso Stevens Institute of Jechnology, HOBOKEN, NEW JERSEY. March 2. 1880. Undem Mir Edison One of my students Mr Howell, who initia Meulo Pack informed me that you had enfressed some confines at my having one of you alective because in my possession, & only a few had left gam hands which were in grown aden you to that the one in my keept he imperfect.

O had no idea that the same of the lands of many feesing thereing the tryon have I obtained mine for The Scientific amineral office our Day

about three weeks since , and I then asked for it must became it was conversion for must became it was conversion for me them to get it within your to been making many experiment on the land shifty or the donation of measure the container of the cache horselve when other conferent to that when hot and conferent to that when hot and conjunct to back with het and when the shared many mounting author the shared to be out happy to have the boar of a few of your lamp to column my work in the breaking the amount of acceleration the amount of acceleration o Your very truly Alpedd. May er



Sincerely hoping that you may succeed in your radiason by fine the world a better light than it has sur had a better by wash to come within mach of the marces, I am your superfully blothers was the blother with the blothers was a superfully blothers was the superfully corner through all places was the superfully corner through all places was the superfully corner through all places are superfully and superfully and superfully and superfully are superfully as the superfully and superfully are superfully and superfully and superfully are superfully as a superfully and superfully are superfully as a superfully and superfully are superfully as a superfully as a superfully as a superfully and superfully are superfully as a superfu

the chandelia - wire can be obto from Engre Phillips

Philadelphia Pa march 3rd 1880-J. a. Edison Eng. Dron Sir Referring to paper for carboylizing! JoB Crane, Addon mars; is mfgr of bour and silk fiber phons - Dethir Sons middeor Locks Count of black hump marilla. Thise papers tran other - If such papermisignt was so blankled as to cross the fiberous Stru -clien of the paper and was There abhered together by a Signey of common glue boiled in Enlund milk (whey) or Skinewed milk which! would reduce to fine grances corbon, it might prove duriable or huy added to glue changer

it as signing -miser paper Dimply immorest in solition of such acit is Suddenly Changes in its fiber - ous structure (See Walls Churchy for formula of Solutions) - and would Throntically sunt by Will couper with they brother at Holyoke matter _ I want you to make your light promaunt of not already So -This college smides can't duplicate it Eh ? I can see invention in it and you horz simplifier, and profectivit sous to place it in the hunds of the public a result which involved invention of the most morker character Yours to CE Buill

Manufacturing Company! New York Mc Lott 1890 Mr. Thosal Edison Menlo Park At Dem ais Some time since at your request we sent one of Machines to your address for experimenting, in order to keep record of same it was charged to your, and in closing our books we find the 1/2 still open, please advise we if you wish to return the Mach' + oblige Youre truly The Dinger My loo per It landentungh.

Drexel, Morgan'z Ca The Page patent (which they own) for the perspose Friend Edison Think you Can get pay of Strongly recom as the Chance Offers. probably have shortly long fresh regotiations with Re breeken U. J. Co. Islay park of your bassain Ruh the Br. M. grant you

ho 8. E. Houchice. Mu bolien. Trac Deles Bros, howe an angeo with you for the wine of your with him cian? Please he us Unow at gun emornence Vertige Junes P. a. Becenum Bettorney and Counselor at Law,

Attorney and Counselor at Law,

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Mr Moto Please w to a.J. Buttler Wow Brunwick We find That The glass Meder carried work to exact diges therefore percento Jame 50 of the Prings The Bruswick. · lamp bost tonigh so we will turn 8/4 16 rder on cardPENNSYLVANIA RAILROAD CO.'S TELEGRAPH.

Roceded of Office. Operator, o'cit. M. 3/28 1858

From Philar For It Edison

Report from Rowland good will give give you a profract week voice do you want any lextra copies— His presented would in not be better for me to come over on monday afternoon sandget the lamps than run the rish of having than listen by Express Basken

J. C. Handerson Esq. 20 Nauro de Born 24 Will I have to furnish the Lockets & O under stood that Men Cary was to have Them made a Sher the sample which I had made for him & sout to him. The day after he was here. Oscade andever aidam an Shall do all I can To have Mings ready for you at the The meath and it soiling be some what Doubtland about in grown remember of Lamps Prof. Barker Oliverety of Pauna. I Lend you Today por Eroya. 2 cases containing 2 Chandeling & 1 Student land for electric KILL Of Grow Martin

Rachester My Mar 22 2 Thas a Edison Eng Dear Lin: While I was down each last week I was constly eigented to com-- minutate with you, '& therefore I do lo. happing it will statisfy you as well as them. Some lime ago when itbecame of public intent, your invention of the elistic light-as you have have it, I made the remark in company that, the election light in Warus was our To years ald, I said this with no intent to prejudice any mo, luch of have been applied to for pring of what I said, Imentioned all this to parties who evidently you raw Entertained & they arked my Inidians to fuch lay legero year; what is regend to I have m an ald English publication, & so I ful sui there is read such another in this country & wiel Cefy for year / you way so), so that you can we at me if it has any learing on your intents. as I am an inventor myoney. Druck interested in Satisto of only do & athers. as I flow wish athers wanted do to to zono ... Zamo respectfully James Waylow In I have positively refused & action the back and of my passession, but for you will capy it of & send face. Reasesand copy - grove Dan Nother produce the Elin

TA Edison mal miladdies (Levayer the Electric A jearce Dont Know evact address herhapo m some salvon Walker for

Frof A. A. Eddison Menlo Park, Of J. Pear Sin, I was sorry not to meet Ar Backelon today and saplain a few matters about the press he looked at when here, and taink perhaps it would be letter for me to cee him before you purchase, It would be interesting to me and afford me great pleasure to visit nima laboratory, if agreeable wyen, ned Dinned then be able to answer all questions which Mr Bachelor might saish to ask. The principal point is, how long would you want to keep up a very great pressing If you decined cay, to Keep up apressing of 100 time for 10 or 12 hours, it might he well to modify this press in some particulars.

likewi lell how list CAnu Goik in we have for y wished to prese for short time it might answer your pay han ye water a sold in. The price in its property shate wined be good, but, I think we would have to allow 25 ontoo more to find The fourth in perfect order to Char gamed on Tell exactly what it would be fountal it was Thornighly overhauled. Showeld not exceed 150 - "wo would probably be about \$25. to I have already said, if agreeable to you, I would run out any day & meet you and talk the matter over a would then he very happy to give you any information. I can regarding haydraulid accumulators. I would not recommend the pump for arrithing more than an experimental one, as it would probably not wear well in continual revoice, It would auswen well for experimenting. Your Respectfully

wished to poor for or too more to fact Committee in the offer on de the come to be The word of the Many home houle & six wind not exceed Later wind freatends for about 220 As I have already said if a grante to year, I would rain out any day & meet you The matter over a would them very happy to give you and infortuntions regarding hayd mulid accumulatores. Desmed not recommend the humby for anything more than an experimental one w it would protectly not wear well in continual services. It would andwor very well for experimenting Jone Deepatuly

Reme Depote of Phila 26 Chami Daturday Sandray With Window Can I get lodging " It there an Endrate.

(Pinter Light Tests) Report of Engerimento made and results obtained by Professor Brackett and Inform Young in their investigation of the election Lamp at Menlo raid, Miday, March 17, 1880 Constante and Fundamental Equations.
On Array gover equals 33000 fllo framin.
On Nort found equals 1.356 x01 cops
E. M. 5. of a Danielli cell ce latin to be 10.79 volta.

Of 20 cells is 20 x 079 = 2158, log 1.33 405

W = Elt = E² T, t = C T, t " " R in Ohms = 109 W in one minuto = C2R 60 in erge = C-R 60 = 60 × 107 w ft. llep. 7; = 44,25log. 1.64589 144:25 is the Constant for orducing energy, 3000 obtained from the above formulae, 38) to Horse Power. (Sy 7.12738) 1. Determination of the work expended in drawing the Dynamo machine. Dalla. Diameter of driving pulley 38 in. Revolutions per minute 188 Difference of tension between driving and following branches of belt as mil teated by Dynamometer 98,8 lb. augle between hanches of Dynamouster belt assumed N.P= 98.8 × 188 × 38 × 1 See 18°

nputation Of this 5.88 MP. a Quall amount was expended on the fiction of the degreemonate pulle, and considerable anon lipon that of a countership. selving the dynamometer and machine; Shi precase account of this apendition was here no data for computing with accounted the properties and accounted at a year fails, to solunite and about plucest of the poly as the word and hended in driving the armative of the machine 5.59 N.O. _ E = 10,536 volto But the form of the form of the Section & Breeze Barrell Commence

188 2,27416 38 0.49715 Freewas expended Sec 18° 0.02179 5.878 Horatown. 33000 a.c. 5.48149 12 a.c. 8.92082 5.878 N.P. 076995 Determination of the Work expended in maintaining the fild of force. Data-20 Daniell' celle gave a diffiction of 340 divisions with Nigh Residence Valuears, Firminals of the coils which maintained the field of force gan a deflection of 166 Bis. Resistance of cost on magnet was 1.43 Ohm E = 166 × 20 × 1.079 Computation

2.22011

1.33400

7.46852

1.02268 2.04536

9.84466

1.99476

R.P.C. 7.12738 N.P.=0.104 Explanded 9.01740 on maintaining field of force assuming that the feroing machine had the have efficiency as the distributing machine my about 80 the top for a sepural to produce a sufficiency, faiot N. will be 1001000 0.13 N. This added to the 5.874 N. Propulsed in driving the distributing machine gives for the Mis

as the total Horse Form expended, in for the the work done by the distribution machine.

5.72

166

21.58

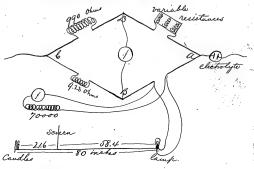
340 a.c.

3. Determination of the efficiency of the distribu ting machine. Dalla: High resistence Valvanomete was nadjustion as dial 20 Daniello cello gava double deviation of 131 divisions bitteto High Res. Gal. Firminals of the machine gave a doubles deviation of 622 divisions Resistance of circuit external to armatime (adjusted to to nearly equal to that which it was assumed will be notified in practice for 60 lamps) Reasured at beginning of copiument 2696 measured at rud of openment 300 of the change was caused by the rase of temperature during the experiment. " Plean resistance assumed 2.95 ohms. Sign of cleethodes 28 c.m x 39 c.m. * Thin of regative electrode 3,358 gm. Cu. Resistance of amature 0.14 ohm-Factors - 622 x 21.58 622 2.79379 21.58 1.33405 131 a.c 7.88273 E=102,36 volto G = Win mg. W 3358 mg 3.52604 E 102.36 2.01057 0.48678 T a.c. 300 a.c. 7.52291 C=34.734 Webers 1.54045 C = 34335 Weber 1.53573 Horse Fower = CZR x N. P. Constant 3.07146 3.08150 0.46982 0.46982 7.12738 7.12738 =4.663, 0.66866 N.P.=4.772 mean value N.P. = 4.717 Efficient in distributing machine

Ratio of Energy entilized to that Expended First Delermination Second Stormation 118, 4.772 0.67890 5.720 0.75739 JP. 4.663 Log 0.66866 5-720 0.75734 (2) 0.834 S Efficiency (1) 0.815 Mean . 83 per cent-Ratio of Sungy developed as current to energy Expended a portion of the Electrical energy developed is nachosal, Expended in the armature of the machine, the great menuces and findending the mediaphoton) by and he total Energy (ricalending the mediaphoton) by annot add the sheatene of the arrivative to that of the External Circuit - we then fet : R= 3.10 olius, C, &G2 remaining as before 3.07146 C2 3,08150 R 0.49136 0.49736 7.12738 N.O. 4.901 5.720-0. \$5.739 10,70024 JE 5.015 0.75739 9.93281 9.94285 .857 Mean, 867 That is to eary of the energy Expended in dri-ving the machine of precent appears from our Experiment to be accounted for as elicities work, while or percent is available for were

4

Urrangement of the Electrical and Photometric test of lamp (No. 853.)



Data.

Resistance in branch DC 990 hm.

Mischel BB 9,23 Phag.

In Night has had used for determing

the E. M. J. about 70 000 ohn.

In branch BB - 10681 - a mean

balue. Drumg the laperiment

this measured naistance, M. varied from

10670 to 10700, Dechangs of one obm was

exily freceptible.

20 Daniella Cello gave a bouble deflection

of 130 divisions with Nigh Kis Isl.

In terminals of the lawfring gave a

bouble deflection braying during the

expriment from 491 to 446 Men 461.

Dain of negative electroto 449,5 mg. Cu.

Brustion of texperiment 30 min.

bought of scale of problemeter 80 min.

Brustion of scale of

6

4. Determination of work expended in lamp. Resistance of laws = 10681 x 9.23 x 701 (neint sweet) 10681 4.02861 0.96520 9.23 990 a.c. R=100 99.7220hms 1.99879 E. = 461 x 21.58 461 2.66370 130 a.c. 7.88606 1. 33 405 E= 76.526 vollo 1.88381 449.5 2.65273 This current obtained 326 ac. 0.48678 from the observation of 1800 a.c. 6.74473 the amount of confine aprile of C=0,766 Within 9,88424 alforest Current. The Current in branch arc: Current in bamp The Current in branch CLOC: Current in many branch absc: (9.23 + 202 (99.722)): 11671:

Current through lamp = votal Current 11671, 700
11750 701 Total C 9.88424 11671 11780 a.c. 4.06711 5.92885 Cinlamp =0.7578 Wrbes 9.87958 Current through lawf computed from the E.M. F. and K. = E 1:88381 Ra.c. 8.00121 C = 7674 Corbus 88502

In another experiment, rejected on account of a possible error on wrighing an electrode, the results of times mc. from the E. M. of and R. agreed very closely with stouchaster.

Horse Power = CER + Noise Power Constants. 7578 Wiles AP.=0.07679 0777 expended in a single lamp. number of lamps of similar construction which could be runty the machine. 4.717 Effection N. P. = .0777 N. P. = 60.7 0.67367 8.89042 1.78325 0. <u>8.89042</u> 1.10958 pereffective N. 5. Photometric test. When the lamp was broadride on the candle power was given by (21.6)2 58.4 1.7664 1.3345 squaring .43 19 .8638 Candles 14.6 .3010 When the lamp was Edge on the Canole power (30.84) 49.16 1.69164 30.84 1.48916 .20248 Squaring 40496 301 03 Candles 5.08. .70599

8

Recapitulation of Kesulte

Potal N. Perpended 6008 5.720
N. available for
Missingular meach lamp 0.0777

Folat number of similar lamps

which the machine assume

"freeting could year to be

faught over - lamp broadwar 14-6

lamp Edge on 5.98

Istal Electrical work developed by

machine 86.7 7 of work Expended

Utilizable Electrical work 82 7 —

C. I Beecher

Eliforny

Princeton March 27, 1800

Frago RA T. d. Ediso B Llorony Plan any day de

T. A. EDISON. Menlo Park, N. J., Mar 30 Groff-Les & Barker & Hung W Draper hewyork Cing When will you be ready to tee -

that & believed you would VILLIAM D. MARKS. WHITNEY PROPESSOR OF DYNAMICAL ENGINEERING Certainly sucreed in produce. bug 10 lights of 16 candles (i = sooth firhin of gas) fin HP. My dear ser Afri will fine Coe Army Tou a Therough fautteman My understandhig with Roy Burken takes as foot a feecen as Buson. both of Them have has that the expents on Thirough confidence in your your light was to be hoursty of purpose and only Continued Whether or ha wish toknow the Exact truth Norve we came, it seems I have Jaio to Rof Bailte that a mis understood him or that Bury that Banson That I shall to rhave to for on with the word wherether I Cal Armington any Ballyn he faces sur that he com-Musto will nich you in a do se without fail. day or two . - I tale Burson A believe & stated in your What I had learner during presence that I do not care my privious risit toffere. to suder taken work without place + love him alse Lowe 1stein to my of aux

That & do not come to tripa My time away . - My return in the present instance was To have bran with professional or scenetific glory) int many the right to use all the Knowl " no for telf and friend Mo you Know, I do not -Wish to 17 suid understood / There for state very norther frankly & Know That you desire the widest publicity we ought to desire wan mon The Envite rinformation of men Engages in the lighting have ny huly yours free Theneste

2 Toronto may 30.8 Sorouto med 30 h for Mr That A Edison Throwing your willing nep to Extend any courtery in your power to those interested no the cause of science I take the liberty to beg of you the following information Can an electric current carried 3000 feet by a /4 inch copper wine. trave sufficient force at that distance from the generator to produce anything liste the same degace of heat in an. afraratus which it would at a distances of 300 or 600 feet? Which would be the beller for treating alone a direct current or an alternating current omerationo? Would a generation

of 3 ovo, carrale power (nominal) revol. - ved at about 15 or per animals produce Ruffreient - Electric force - at the distances mentioned - to induce an online hear at all? If you will favor mo with a refly shall astern it an honor for which I shall be truly gratiful brusting at the same hims you will not consider one as both. ering you with needless questions Being arrable to procure accurrence plains here Enclose the price of one I have the honor to remain 4 W Dingoman Toronto Outario Down of Cawada.

Minto Park of March March 312 1880

Mar L. S. Edison

Minto Park of Dean Din

Low favor of 29 mist received relative to Serving March in Lound by me aometime sines; on we we destand that you wish to retain the Mach; would say that, you mught send and Chetric Per in

exchange for same, ar we could make good

Your truly The Dinger Myleo 10 Il Hardenbayl.

use of it.

m . My 31 March 80 Dear ai Gour favor of 29 and received relative to Deving Machine Journal by we sometime sines; as weundustand that you wish to utain he Mack, would say Mat, you might send an Chetrie Per in exchange for same, as we coded make good use of it.

T. A. EDISON, Stephen & Fired Eag of Me Shing Can you ing The Warth Bloomfield mining to use ? have been asked a runke. of trues in regard to · beige My dear Edicing: light bouch meeting a city light bouch meeting - It with a guit begs mough for their work and they contempted a larger Trabelles IS Full

Feirocism Muladelphia Pa Argonge Hatel for Tabor of Williams Page and Co was here today and . W. Making Camps for Columbia with attachment for "The We had a talk within and suggested for his lamps his father, making it so that we could conceal the come from orew - Sid you within the bookers with these lamps of a please write us

unideality as we shall make then factorallasty for a little different a chape to pull their firtue - I had an idea that you wanter them all in worder base but can make the first as eary Shall me? and knownay? Edison OB Meh 31-

Mur. 1880 Path belarke Gas Woorke Rahway come down to night apparatus albready Ja Edwar

Jahre C Handeran Cog Doas Li The tel me Know Now you have arranged with Country Staff & Hum The Dynamus Hall we have to make nucolines right & light as all allike ? We are finishing two now OK. Up. 1

Of all Hunkle Do you know af a good Jaweller how is compatent ap Doing dome fine work in Plating which is done what like instrum, work if to please let we Mr Carn Olo. m A. Segrmane A supl Todand our Dynama parts ov down eld farmit apr 6

agreson New York, ex 15:16 1880. (Marila Park) 2.9 Odear Lin Obe received your favor of the 12.1 pais . wherein you inform my hat here must be a whichate about the promise of the grift of one of your electrice laufy to over Make Genreit while dalling at your haleonatory on the 27 th of Fellmary 1880, & bit okriber us also Max there much have been but as an all correspondent friend of our me me the Elhand & of up to skind here and of the diser be very glad to be able to couply -with this request, we take the liberty to again apply to you hopking that you will lave the hindress to seld up one of he lamps, we of course paying all

or this should not be convenient for the glad by send one of our found for it at mento Park.

NW Tabor Care of Williams, Page, T.C., 24 Beach Street pens in 'ring' for lamp pens in 'ring' for lamp pretats: We should like to have it as soon as possell Late OKCIAT

Jos Medell. Egg Yound you tests made by Praf B. P. R. wither last

by Raf B. P. R. withen tool and being made best somefre man - your correspondent named Hall of nay tribung wof that class of ability that he could do get a tanto Came beac Asland alors of 20 minute and then write his ling and all from inferences based on inference of the true

that gaming 1st we put up about 80 lamps the finst made, to asculari the life of the lamps They have all gone out their average lest was 792 hours the whorlest 26 hours thelongest 1388 Lours, a very salisfaci result for a 1st exporement) I have never consealed this fact when alany Euroles I lot it remain where people could see it, my Laborator is open spece to similar specifications of such as specifications of such as the such as the

2 & cont have easily have winds new lamps and replaced those discroyed and the office proposed to house by Every sendofer who comes about of had I wished to decree the The first how was that substitutions was impossible - I subtinely it, now nothing is said about this improve. ally The next havil is that allhangh I can suffered the the not Economica (- Now Parker of Rowland has pheron that of can afterin

halit Equal to the "Cest gas gets ablam 13 (16) fording gas jets) perhance power in Elichealy twith all laxes about 10 net - Backer using 20 cubic fect of gas in a gas engine ollaine & grant with They light to be hood a burny the gas denot hearly gut 4 lgets one hours after all these seculific fish are and they will grabably adenainled gx. The changer auch ay

that the lamps want last or what of commander want to be marined at the marines of the act of the a

John TKh Medid Operator

clockwork lamps to be , had in the market anxion,

J C Heiderson St George Hotel Metadelphu I dow Think There to 2 Run quone
- Dalchelu

Stock Telegraph Company, Western Union Building, New York, Ope 9 1850 JA Edison Ry Defi onvenier a a fr would like to bring a friend of hime Caps Frank Bans to see you tomorrow Pm leaving here ar 3 Pm He wisher to consult you as to the availability of your light or rather its durabile . If used to light a floating Living - He dad much me Drove than from 5 to 10 Candle power - o can get 3 Horse If not concerned to see un tomorrow please zay When roblinge yours time, Alushing for

346 East 17 thut april 10" 1850

J & Edin Gr

at Si

at home on Wednesday must, and if to well at he consented to admit an actual from Hayon Kays _ Over and with multi-well or handle you for more them as assumed a two,

your ousty. I Bellew

Come unytime we have with winds

New Haven Com. apr/2 80 Thomas A Odison Menlo Park W.S. I take the liberty to mile to you for the purpose of calling your attention to an improved Dynamometer invented by a friend of mine in this city. I believe he has embodied the correct principle for the most perfect and convenient device for the purpose - It indicates the power being absorbed a used, upon a dial like a Steam gauge - the pointer constantly varying as more or less power is used it- being very sensitive and accurate. I judge it would be very desirable in connection with your Electric light generators, If you have not a satisfactory Dynammotic of your own it might be north investigating Hox 437 New Haven

FRANCIS S.KINNEY, Pres! KINNEY TOBACCO COMPANY, HENRY A. CUPPIA. Seev & Trees? KINNEY BROTHERS. 515 to 525 West 22° St. In answer to your favor of Think I beg to inform you that I Dfx Adulo Dack under te inference that you would beard here one of your mino the pay for your to of the Dreso, cumulator, Oringo, cto, so you would have no iculty in distinguishing them and putting came together again when received, with the view of swing the expense of a mechanic from here. of you wish the accumulator cent topul ac-- companied by an expect, I will chip rending at your expense! - Please advise

A. Elisar Minlo Cank, OV. J Pear Dr. John De Hat we have this day chipped you by Euna R.R. the accumulator bunke, pipes & connections. Upon their arrival be good enough to thegraph no and in will send the me-- chanco at me to put up the accumu-- laterT. A. EDISON.

Menlo Park, N. J., Opril 1575 1880.

To Co.J. Hendessom

G Goarge Hold Philadeline

Will have two madines and houry language ready for Shipman Monday or before. Soul Direction by Telegraph.

J. a. Edison

CA.

HE WESTERN UNION TELEGRAPH COMPANY.

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Me plane tamporaries

This may was rued about owns after yours was sent Date Ollypora, nor post of post of the pos

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T. A. EDISON,

Menlo Park, N. J., april 16 1880.

J 6 Henderson Engineer Stamer Columbia Chester Pa-

The Express les would not take machine where will you have them in hewyork

A a Educon

(api.17,1990) Phense of trip to nemark regard & two enquies certain problemo in steam engineering. Jacob & 1.50 Dennie 22 days \$200

7 a Eclison los to present

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THE WESTERN UNION TELEGRAPH COM were Carelessly

Weather Bureau N.Y. Herald April 26/880 Thos of Edison Esq I f it would not be too much trouble. Mr. Comory would feel obliged byou of you had a small lamp made for him. The batteries used in the School are not sufficient to light the out you have one. Please send in the report of Profi Brackett & young so that I may bespect fully Demart A Collins V.B. It possible bend ticket for two \$8. Columbia exhibition. I don't know when to apply for one.

you Sometime Arne What I had invented a Naumen pump that would broduce I have since bufilet and small hump, (an With the Brunk I am Swhich Contins about - mine Cubic mikes of air, in Mr Minutes Rusting the punts by hand May franch is at be my prediction denstruct

aning only two values and Muste on the cubricle of the Cylinder I me making in Who Cylinder If you ful in blacked in Secrety The four Peracture a purpos mention, me will be glad I make an appaintment Ine Fletch

[From the American Journal of Science, Vol. XIX, April, 1880.]

ON THE EFFICIENCY OF EDISON'S ELECTRIC LIGHT.

By Professor H. A. ROWLAND of the Johns Hopkins University, and Professor George F. Banken of the University of Pennsylvania.

THE great interest which is now being falt throughout the civilized world in the success of the various attempts to light houses by electricity, together with the contradictory statements made with respect to Mr. Edison's method, have induced us to attempt a brief examination of the efficiency of his light. We consider the property of the information of the efficiency of his light. We

made with respect to Mr. Estison's method, have induced us to attempt a brid examination of the efficiency of his light. We attempt a brid examination of the efficiency of his light. The efficiency of the efficiency of the information on the subject important because most of the information on the subject important because of the efficiency of the light, that is, the but conclusive test of the efficiency of the light, that is, the mount of light which could be obtained from one horse power to the efficiency of the light to economical, the minor point as manageme. For if the light to economical, the minor point as many control of the economical, the minor point as many control of the economical, the minor point as many control of the economical, the minor point as a subject to the economical, the minor point as a subject to the economical, the minor point as a subject to the economical, the minor point as a subject to the economical through through through the economical through the economical thr

method consisted in putting the lamp under water and observing the total amount of heat generated in the water per minute. For this purpose, a calorimeter, holding about 1½ kil. of water, was made out of very thin copper: the lamp was held firmly in the center, so that a stirrer could work around it. The temperature was noted on a delicate Baudin thermometer graduated in 624 G and 15 the control of the contr

As the experiment was only meant to give a rough lies of the efficiency within two or three per cent, no correction was made for radiation, but the error was avoided as much as possible, and the period of the per

$$\lambda = L \int_{\frac{1}{4}\pi}^{\pi} \cos \alpha \sin \alpha \, d\alpha + J \int_{\frac{1}{4}\pi}^{\pi} \sin^{2}\alpha \, d\alpha$$

$$\lambda = \frac{1}{4} L + \frac{\pi}{4} I$$
paper lamps we found $l = \frac{1}{4}L$ nearly: hence $\lambda = \frac{\pi}{4}L$ nearly

In the paper lamps we found $l=\frac{1}{2}L$ nearly; hence $\lambda=\frac{n}{2}L$ nearly. The lamps used were as follows:

No.	Hind of carbon.	Size of carbon.	Approximate resistance when cold.			
580	paper	large	147 ohms.			
201	* A	u	147 "			
850	66	small	. 170 "			
809	66	66	154 "			
817	fiber	large	87 "			

The capacity of the calorimeter was obtained by adding to the capacity of the water, the copper of the calorimeter and the glass of the lamp and thermometer. The calorimeter and cover weighed 0·108 kil. and the lamps about 0.085 kil. First experiment, No. 201 in calorimeter and No. 580 in pho-

First experiment, No. 201 in calorimetre and No. 589 in photometer; capacity of calorimetre = 1/158+0904 +007=1-198 kil. The temperature rose from 18°28 0. to 28°11.0. in from inutes, or 1°76 E. in one minute. Taking the mechanical equivalent as 775, which is about right for the degrees of this thermometer, this corresponds to an expenditure of 8480 foot pounds per minute. The photometric power of No. 589 was 176 candles maximum, or 181 mean, A

when the lamps were reversed, the result was 8540 foot pounds for No. 550, and a power of 18°5 or 10°1 candles mean. The mean of these two gives, therefore, a power of 818 for pounds per minute for 11°6 candles, or 109°0 candles to the borse power.

To test the change of efficiency when the temperature varied, we tried another experiment with the same pair of lamps, and also used some others where the radiating area was smaller, and, consequently, the temperature had to be higher to give out an equal light.

We cenabline the results in the following table, having callused the number of candles per indicated horn power by taking 70 per cent of the calculated value, thus allowing about 50 per cent for the friction of the engine, and the loss of Asia K. Saisson's muchine is undoubtedly one of the most efficient or made, it is billowed that this estimate will be found practically corrent. The experiment on No. BIY was made by barboring the photometric power before and durie the calorisation of the control of the contro

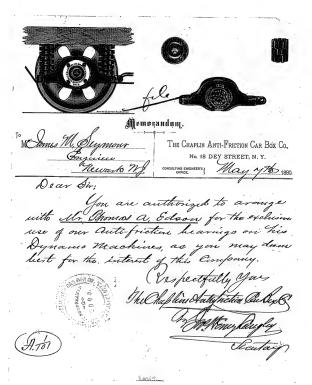
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Calco-	Photo- meter	measured perpen- dimiar to paper, L.	Avecage,	Copped to your	Hise of persion	Poster feet-good	Mean particular properties proper	Mean Man Man Man Man Man Man Man Man Man M	Mean por Contract of Contract
201 580	580 201	17:5 13:5	13-1	2.57	1**75	3486	1090	6.8	4.8
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850	880 850	10.0	14.8	2-81	1°-14	2483° 3330°	133-4	8:8	5-8
817			17:3	2-73	1*-28	2108-	209-8	13-1	92

The increased efficiency, with rise of temperature, is clearly shown by the table, and there is no reason, provided the carnose can be made to stund, why the number of candles persons can be made to stund, why the number of candles persons of the carnotic students of the

Fre m Sash, Blinds, Doors, Mouldings. Brackets, Stair-Rails, Newels, Balusters, &c. JOHN-STREET, FOOT OF MORRIS. New-Brunswick, N. G. S. Mr J. A. Edison Your card is at hand, and mply would say that in will Hoping to orcein your order Jours Very Thely F Butter 1400 - at your convenien

Mor. Carnar (apr. 1840) Mradley J. Bradley 3 oclosek Iftericai White Brigmans We spipped the Dynamo 10th 19 Lot of No 10 Callan concred were at may last night to Margan Dran Mostles food of east 9 to street not have shipped by PRN freight 2 Dynamo madring for Henne Calumbia, book from pels are to him them carfuly an heard of her 2300 M the weight afthe Two 3300 lbs

Mer. Carma (apr. 1880) White Segment & Whitever in The most urgent way That we should have our Parts for the Dynamo Mod. night a way we are badey dela .. not having them TUE Teligonophica To send all they had



School of Mines, Columbia College,

allright-yannay Keeplhe Lay

A. Edison, Ph.D.
Dear Six:

Theore inform, me when it is most envenient for me to return. The Samps you so kindly provided us with. Of the Eceture they whaved very mell indeed - is followed all your suggestions as to managing them with a Wallace Markine and with great success. Yesterday smelody third to experiment with them, through on too much current and runing four of them, and is have the mortification of returning bossowed property broken. It including you would be glad to know that they were a success bublishy tespectfully.

C. E. Colly

West Point my may 10 80 mento Cart N. J. Dear Siz By Hendrick you make or have made at your laterating the small vacuum twhen soon for illustration before closes.

To avoid mistake as to my meaning I roughly represent what I mean port of The twee are governed from 3 to 6 wiches long and & 6 1 mich in diameter - PP are flotimin wines furer into the tubes - the flatinion founds should be from to to \$ wiches apart - He tubes as nearly ferfects vacuous as formble_ verytruty Jums, He S. E. Tellman St. h. S. Anny Instructor at hil cealing

West Point N.y. N.y. May 10,50 Lieut SETilluman Prof J. A Edian ments Park Ng. Dear Sin_ of the 11th just accessed, Prof Hudrick directs me to say that he will be very glad to have you muche for him four resum traded, if they are mit very expensive, If they

are troublesame to make or expensive three will be sufficient. The length of the twhes may The anywhere between three and six wiches - I cllustrate a little more flainly than in my last what is desired -"The flatining wires do" should not connect of from of to 3 inches. I assume that are millionthe will be a sufficient high vacuum though I do not know how highly anch tubes are exhauster. Prof been-

chrick requests that the hell
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ment h. S. Milder academy house
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ellize us to have the trobes
as soon as possible—

Very Respectfact Jones of Jillman

Lt. h. S. A. my.

Que order to Bookhun to make
of forman to trong to.

Say to Fillman that

We do not want pack for pale but well give thank him

My plear Edison: - manswor to your letter yesterday & would say at you can have the use of my Pawyer lamp, of course. But the one I have has no blass as it was broken in coming). If you are not in a great hurry I will get-mr. Wallace to put another glass on next week. The lamp I have is the formy lawyer wade a year judge from the recent cuto the decentificamerican that he has lowewhat altered their form lately, How is your lamp getting on and what new developmento are there? Wrangelling f

PHYSICAL LABORATORY, State Agricultural Gollege. No we donatall thun eyet as soon as our new Lang feeting functed Mr. J. E. Edison disir, funched in 3 mark Mente Pack N.J. & Dear Sin are the Depure -Electric Machines of your invention in the market, and if so, where can be obtained? Hould you be willing to to sell me for the purposes IS Class ilenstration one or two of you Horse show Electric lamps "vacuo lamps "? Such an instrument from Laboratory would be highly pringed, as a gratist novelly olet here. Very Repestfully JAMacomber

send och 3) so m 2 Edison ma Etron all me ad some difficult carbon loops to fat the un clamp when use marilla fibre It has good part fitter dan plant the fibres into almost any desired shape and I venture To offer you the augustion that that that most of my engagestions to ovi already be gone over It is difficult toget ahead of your region with the what it you is write dincorly yours

1 Hewoyork may 30/00 TA Edwar ments Park of bolumbia arrived Rio yester, reports Elison light working well

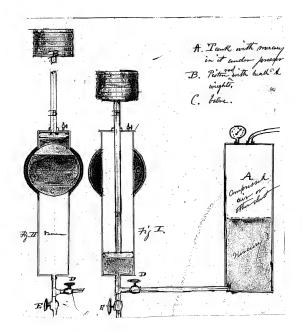
Francis Kinney Warns chu Brey Atm S.J. mr Educa Lear Si Since Sering your latratory I have thought much about bacume " a great may clear of for ducing high bacum have occured to me and them there of the of thought but did not impres two currents would be as I show acting and

one of your lamps. on how much would deput on the adjust ment of the like that give the most effective direction to the cuir currents. Conother idea I represent histy Metch which I enclose - and by which I try to show a method of Ruping Mucany under preserve while it rise to force out the air Cylinder Fig. I thours morany in to a cylinger and friend Poster D. which carries

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you are gute mucholien about the Carbon horsestoo being a fact Under Mahomed Champings En De Jun 2/80 Im - Edison Azar Vin I watched with a great deal of nuterest your experiments in your Westire light hoping timeerly that you would buceced, I fett much disappoint Tome of on braving that your carboned were a failure, In out a long they Short, & believe that I have got the Thing that will perfectly andwer The purpose, I think Dwill stand The est in the open air without a globe I may be mistaken of convaryou are botter frupeword to give it a perfect trial There I am The price of The Thing will be nominal, I propose to let you test of to your autin Satisfaction, but before doing so, your your company must parfeetly dreun Ou me my notits one conting, are article of reprincil againg to pay me if my discourse a luceros, a value in proportion to the worth of my discorry to edged before a notary bublia.

On neight of such an article & will And you my discorry to test it. my nusons for the for egoing propositions on I do not come to go to the expense of gatting a patent, and the thing be a failure, of it is advecess & do not propose to be cheated and of it? If This a Luccess, I will heror It festuted in my forthe bustin of your company, provided my neglets are formaded for, On neight you can now your pleasure I make you the first proposition house I Think you deserve In Succeed. Mahmus ?.

[FROM JOHN KRUESI]

Ch. Portos Booker. E. condidad That he Should malke & six The Home for our armetice Me sublace amone of som MTw. s on mus enquire Thinking it may of byroine to your Philadelph-

Yan Francisco Jum 14 scientific progress, the completion of an dynama elictrice motor has been occomplished. A stationer, electric motor of from 5 to 20 hore porresson must create considerable resolution and be of great sanice in regions, where ful g mater is scarce. you alove all other will fram your experiments a experience be able to master The questions. Ob it preside to construct electric mative from for less than the sileam ingine? and how som anils. me officed to have these madines intraduced & Parkon me of o infringe upon your time, but by answering gen mant greatly ships Bours Respectfully 112 mason about S. L. Ox 3 filler may.

ISAAC ROSENSTEIN & CO.,

Manufacturers of Eshirts,

Jose PROSETT OVERTOR.

Jose Gork, June 14, 1880.

Lison. Den Gr

I know of a substance of presidingly encountertable ? It can be worted in this is as find as ships as think as ships call, retaining it all times in our old cine in all and the state of the call, retaining it all times in our old cine in the ships of the call, retaining it all times in our old cine in the ships of the call of th

A can be proceed in large quantities and as a manimal price.

There much will your give one of fulling you the withen a 40% and you fund with practical by making your superiments with it, and faulty a biff it in your election.

with it, and finally adopt it on your class Compt ? I James supportedly I Drofour

T. A. EDISON. Prof & Algoring Director Il S. When will you be able to make an examanation of the impeterious blue halo in the lamp by the spectooseope Ja Cano

June 15- 80

TA Edit

I can come down and Examine it anytime you like

CAyoung

H√C IH√C

from the darge smoke but weather-This glass contracted wise clear. in about equal produce I venture to call wour attention estricia ectric lamps as it is lasticlas it would allow the use of a much larger I son wire in place of Hatimum

This glass fuses at a bout war

Wind our Carbono My Juil of June of June of Chinesia June Washington Lycare Men York (atj.)

PennsylvaniaRailRoad Ce New York Division Office of Superintendent Jersay City, Notime 19 th 1880 Subject : Lightning depot at mento Carel with electrical Thomas I Edward Esg. Meulo Park, nf. Marchi: Natura your favor of 18th inch I shall be very glad to have you put any number afetective lights you may desire in and about our Station Additing at mente Park! Saw have the permission requested to cross our tracks for this purpose, and any assistance that we can render to fal cilitate the work, I shall be most happy to give. Lustruly, James hortun) App C.S. Mill yourple confermit Mr Ettinger in reference to any detail arrangements that may be necessary.

Thiladelphia June 19 Tos

onswer of your favor of the # 18 th funnary first letter of the 19 th January, per Journs expr to your address February sty but and move hours anything about it since I be lead to bring that matter to your ownen brance and pray let me know whether that package, containing the preparation for glass to make it unfragile by imporary that and cold or try fluence of the vecather to and to your hands at all? and whether you experimented with Fand with which results Thave let me hear pretty soon about it and oblige 1123 Brown Str Sh

LieBean Rehmonder Geo. Lune 24. 81 Ks-Edisory_ I Know not ling at all of science. but I sead of you experiment init gritules ext I observe that you are testing different substonces you burners for you lamps - 4 he enclosed grows will here's is Known as bear gross, tis a pilvor , plantion the leaves from 12 to 20 inches long + will support a greate weight than any vegetable substance I have en seen. loves hed + hackled or proposed Gile herm for it would moste the strongest Jape wer Known, or would made exallent saperyou might very the portion of leaf I sont & try IT-Thank him try The rest G the fitre is oplining to a tracker



C. H. BROWN & CO.,

→****BROWN**

TEAM ENGINES.

WORKS, MAIN STREET.



Professor I. D. Edward Mofessor I. D. Edward Mako John N. J.

Lear Vi

One native in the papers done

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or hough to bineigh "to Evorumenthament

red a Meulo Rark July 14 Mr Edison MeuloPark Elbill you send me at Honce by Expus Trulor of your on candescent lamps domestion Size Co, D. Que Robert Kan 17 Paid Xc 1/20 am Lend- 6 CeryHave none to . spare yet_

THE EDISON ELECTRIC LIGHT CO My dearlie This well introduce Mr John J. Thapter Chief Calaineer of the Steambout Dervice of the new Jersey Central R.R. Co who has Careed on as to enquire about placing the electric light on the Companies bouts - I have given him ouch information as I could and at his reanest give him this note that he men care whon you relative to Such details as dam ours oume

Sothe Fory July 27, 1880 Dear Mr. Edison Thereto for you him which I will indernoun to accept some time next week you will no early be pleased to lear that I had belignephic reporter from his Janeiro as well as Valgarias & Voolland strying to the effect that the electric light worked my well. Toistefully your A Willard, per 48,

Ils. Tox me Muin whether on Calarada V h. campidant to to report on the amilitily of water prives in the Mail or hood of Donner & Find nested would be the too pence.

[A VARIANT VERSION OF THIS DOCUMENT FOLLOWS]

El Jo Thapter July 26.86 Lee letter book

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Interes Esternates of hower of allowed anything for Royally to the Co has will be represented a will had only make makely effect the porce, of do not thense it will bring the price of the Light Equal to cleab grown by lord fish of gas about \$1. dollar per thousand which may be to a when if City gas mere wood when if City gas mere wood when if City gas mere wood when to 60 pair le

Menlo Park n.g. July 20, 50 J. Shapter English when dir: It is very difficult in the present state of the experiment to give the cost of apparatus will approach closely; Cost in plant for one boat with capacity and Egyppenente for 75 lights, Engine - Electric Machine complete 1800 100 Lamps (25 Estra) 35 75-Mies to all parts of boat Tobor running wires, Althing Engine 12185 Total felant #2 185 Opreciation Engine etc 4 % 80 yearly each lamp lasto to months will I running to hours daily 60 lights 10 horefrom requires 30 lbs least per hour or 280 lbs coal for of hours or 365 days in the year requires

tonb at 4 estimated at & per year, making as actual cost, hence; Depresiation, interest etc 364 199.60 Total cost per year for 60 aurner Jos feet for wo 876000 fear in favor of thedre Light the tanks The Corners at the it is absolutely 3- That nothing can be set on fine by it. 3- That it is not affected by wind. It That it gives no trouble! 5- That it gives a pure monochromic light. 6. That it makes no invostion but imitates exactly one gas ĝet. Laured 25 per that m grose amount tight will form under water

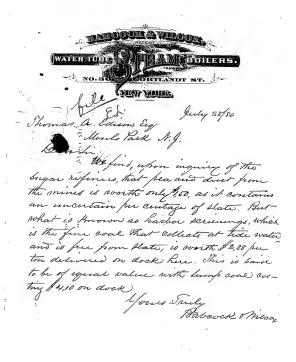
in respect to the large lights of several hundred candle power they are expleneions, require a man to attend Them, are unsuitable, and as the Carbon consumed they disintrigate and throw white hat carbon particles around so that pans are necessary to prevent the places where they are used from being set on fire. in these estimates I have not allowed anything grogalty to the Edison E. L. Cohur this will reasonable and will not very materially extifled price. I do not think it will being the hing of the light Equal to that given by ospher of gas above I per thousand which I will used on the ferrices "2 per 1000 would the first paid perhaps \$150 per year royally would the regard by by our Co the add to the food would also there of 314. yearly wille saving effected by the Elialne hight to say nathing of the lossining the advantages on gas,

of propose to sease the faire of a plateties they to move in Each want with seem globes of necessary the last finding free wife in board for good which find the last finding free wife in board for good which better of a last west

Boston, July 16 1880 Miles Park the surper notes a macond in our letter of Ortunday was not had from our Dafe by the clark & have it paper En an Hony with the God what ded I say to him = great to Dr N = Malybour is fro use in Elictric hight

114 State Street; Prof D. a. ldison nuch n.d. Treps to our letter to jun, and in strange of men letter to jun, and in strange of the total believer from great to supply the most for to blutin light, I said you mit two by 4 press prepared, the mall.

Elecus inform me whether you have chipped overland the additional Electric lights for the Strem Ship Columbia. which you Sermind Mr Hendurow you would send, so that they would be there upon the anival of the Steamer at Portland! Of you have not don! to please do to at once and furing stronger glasses. Yours Respectfully TH Starbuck We have push received telegrams from Capt Boller Mr. Hinduson laying the are no lights their and the Rhip is not half Rupplied



1. 2. ang 30,7880 Thomas Connery Berthamsby. New York, any Dear Mr Edison Me Bennett would like to know if your electric lightcould be applied successfully for the illumination of his New steam gacht Polyma. If yes, what would be the entire cost of the thing? I wish you would figure I out fully and write me at your earliest conbemence. I have ordered sentto you a copy of thankers locally containing a des-Cuften of the yacht, which meny be necessary for you fufose. · Please telegraph me on receift- ofthis a line baying you have received this letter . I clegriph me to Peth Amboy, hew days Perhaps Suit drops in you to- morrow

It can be applied with great Duccess Shall I take the order. It will take oix or Jevan WENCE

ick 1000 计记位数 植野門 精神 Hava Communicated. your answer to mr Bennett and will notike you prompetty of his Carning Glassworks Carning N.2/. How com will our glass owne moved it very bad J. a. adisa

N. 8. otug. 11. 11 1880.

Tienstaine Griffin,

The Glass samples which you sent one for tested and not gas for any practiceal purpose at all That glass is too self. It seems to contain too much so fining was bearing when the and impurisable blown as dismin and a dismin and Dos contains samples. The handle of the little bull is lead glass.

Ludwing & Bohm.

Conterville Gord Co. Prun, Mr. A. Shister Rock replication upon mine who are made to define Tochment times on Munici of Whinet is a long list working of Electric motors Which modules franklin not undiver the adoptedage Cutta button Falracie, Menny quines in a person ting Page Mione and later amal lines from one-Rounce of Tuppy manne - who was - Menter Gener Farbur de-Curpouter and Atjahan Del a Whom the world own bunit by tracty there mes More than it Brotably carded be worthed from Ever with & Saveyer ! one lounce of mysply, Med, Il- Sums to me That an when wanty esto wire reject advantage obtain of the The Munning one home an morrare of but 1/10 If devisal motons can be operated from a source of Rupply which is but elightly more than Enough for one motors will be worked as andre commetty as someters I have several clauses printing for such use of

: W. Cerpentli h ang 13 00 Eldetree Prodons - using Third rail and other adjuncts to Tunk Jours King Thely Countille

13th, stating the failure glass to slaws your teste is sid I am sorry that you had the troubles I send a specimen of iron wire, unled into a common Glass tube; balso irmb steel wires prepared for sealing into common glass. The steel wire is prepared, with some of the Jane glass I sent you. sealed four wises into the bottom of a common text tube & hack no : trouble as Coug as I kept the

the bull- The hote strates of course, be somewhat larger thou the wriesto admit of enough clast in material to take up the glifference makes soon of properly annually this joint will not class you have been teting will work equally well with around after in this process. I hanking way or your kindness, I franking way or your kindness, I franking way or your financings.

THE WESTERN UNION TELEGRAPH COMPANY.

THE WESTERN UNION TELEGRAPH COMP

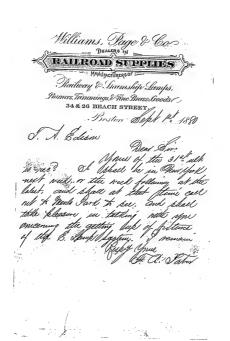
That A Ediso he wire for Elec In building through Tho b belief + aper wire I record to you but

State Agricultural College. Ames, Sowa, Clergest 25 1880 Mr. J.E. Edizmo Theulo Park Jef & I had The honor of receiving a letter from you in Jane laket in which you Outrithe row will be able to furnith your Extron hor horselfor the sold to the bound from the bound one half don't have your for which I hope you with fell as some on they can be sufficiel. Very Respectfully Q K Maconilus

PHYSICAL LABORATORY,

aneo Jona J.K.M.

Chas. T. Porter (aug 1800) Southwark foundry This ladelyshia We have sent the Pattern for the the Dynams electric Massing for ration you are building The Stram Engine To wight of Occase have it bast in gour found & planed to measurment as per enterased setter blue hims indicate where the surface, To be planed. The hale and the two surfaces marked a & b should be particular grade & in general not hape the cartings will be fair parts To your Engine It is disirable that The sean is as soft as can be used to make a good parting Baloods & Willer We are now making up our approximation Estimates for contral station gave in, the Oleans give is gran lowest Estimate On [1200]. Twelvhomared have power , Bailers with and without Economius based open your plane of april 8 7580 Pr (aug. 1980)



T. A. EDISON, Menlo Park, N. J., 1880. Monticello Feorida Sur samples came and so forth to day address me here YR Segredor . Monticello. Can you go from Cedar Keys to Cuba after ym are Storongk in florida Sent Left & 1170

Montreello Fla 8
TA Edvon yes will write today full details information received 9 Collect

monticello Ha. Deft 8/80 Dear Ris & arrived here last was unable to do anything on until Monday waring. The Zun was 20 hot could get us one to net as quide for me through the day I went into a Remains myself without a guide & it was as much as the Could do to got on autagaines the time I got on monday loe is marked no 34 ouds from as Burds P place Knows It mide from town. Westerday I trans thered two suffers the act as Judes & went to Dimons Plantation The place where you leave the main Road is Known as the 2 und branch + their you havet

Is across the country for about Is ariles of tone my fauts of Clothes with precludings have to puss through several swamps or branchest of the Anne one to set where the large came grows What renders this lot extremely interesting is the strong probably offethe bitten by can a smalle The are 4 plassonor varietiesly I saw a cow wheelhad past I been botten by a rattlesmake The was all awolling twice ther usual Rizz I come mean getting can love coming back from Dirnois Plantation, In both Couring of going wing atel we had infestiglic top the walked in the middle Comy tast coming back darkers shouted in acovered from our

T. A. EDISON,

down south that there Was an come there Buy in come places there was quite a quantity of what Mitt. Stale as Chaide

hearly Egyptilar in Expense Evant xq to the come you is often motaken inskilled parties for the True proper t bother often grow within a few yards of one mother, The Lense The k Kind called witch Care grows on The dryston upland ground awant or civer while The red variety y www. we swamp proper This Come proper can be made druder to by cutting or thurning and the Corrounding carie (1/2 as to ann get at it ite for extremely important part is the season at which it is cut when the cap has all dryed out then of is the saule as wood properly cut at the proper of

full of armute Af one time there was a business done in this state of thousands of dollars. mail might, But I got whatman ramely that there wa Couten Lampa + Key West. The man that I gotte information of Days the 153

bane was so large that fishemen for bout boxes also to carry water. "The man who confined the information, Raid he had Den it but he did not Know where topew. He was hearly certain itway Ray West of am Joing ha bout for A after I leave the worther gand of the challed I am from here-lefter to To Chaires # Where & have been told in Inchasombille that there was some Come From there ? Or to Chattahorchee & to brow there down the Apple lychicola River down I have been told thought C6)

She Glegnedon Lept 25 1880 Menlo Park, N. J. Clas 25 o I hard before the many beculty is to get reliated information + the to get the has Caused me a good dead Running Round & Rome money. I have been to 3 and for the can was when the constraint to for pape them to green yet the when I have to the 2 mile branch the thermometer stood bewlen 95 & a loo Dio white man would go out. frother thing is I have got to hire a findle as soon and find out a place also a house of wayon or lanses to vide on . It is with folly for me to altempt to fund out a place on food + alone. Thise all cost berone, of to way one white & higher alike are on the make (13)

in this state. my board alone since & h has cost at least two Medfest pe are not Bettlebilat all You Can get any amounty Land almost fite & passe acre + Covered with the The I can leave there is nothing to be gained by going to the Toverdades as levy ofe says there is no cand there But will go of you wish the Justill cost money for John R. Regredon

the P.S. The came in the barrows places is leadle to be distroyed any thing by fire. The accdulty or premediated to clear the ground or by cattle being turned in the the wenter they crust it down the at the grein tender tops. The any rotter causes burns the other price ones, where it is barrows the mountain at the founts the mountain at the founts.

The mountain at the founts were to be went.

like a rifle I have been told it is gehite a Right to But him a come brake is huming. The himsen of this course high come to grow and to a male great to a male great to the that the continue of the city of has time to gorow before

G. J. KISSNER, PROPRIETOR Fargo, D. E. Aft 10 1880. ma Edison Jon a species of Weed I found lost apoing which Will not Burn! Thinking it might you in your Experiments is my reason for Rend-Very Res Jours adden Van- Wert

(Sept. 15, 1580) Valoanizad Fibre Co. Williamstan Dol. Physind 4 Disks of each size austread of two. I wish To Know whether you Could without insuring the material Dry it & Straighten it. I would if it was not for the transle of the shrinking In marking adopt the File allthrough my elettrical world which will before long. be very extensive. Could apon perhage expen on horizon the warp would be all out of it Of cause I should be willing To pay extra for that if you think it odn to Dane bloase Do it on the Dietes . Thould be glad to here from you about this superfuely TINE

State Appalachicola River Dear Rin. I left montrollot Frifton ben sent on last monly morning of arrived at bhaires early the Rame morning. After running around Rome them making inguises of trying to get a guide of conveyance of bead to give help any illed of getting a guide or knoweyance of getting a guide or knoweyance of severy one here or whorloss een considera ch has done a gre Spot I have the of a few negro of a few negro

occupied by a white Rich. with the trus of all along the the ro the Cane at Wp. 7. hear the end o Lafayette. I was obliged to content shyself with That hald been cutthere \circ masters de the section musters house & hid a tilk with him when he + he will get of cane yet is the (do far & have Ocen Oro Cine that vear equals the e you are Many in density; All Come across I have not Deen tion it will be

The reason why no old come that the proper set fine to that the proper set fine to the Come brakes in the water time to the built and the old Cane In a chart time Shoots of young care springs up in placed of the old And in to which cattle are turned in the wenter The cattle are extremely fond of this young carlo x it knows bery hourishing of fattening as it is the out got pritty reliable information or bourted that there was Clenty of Cane down on the veilla River of on the Wasse River down at + below the natural Bridge, at the very oot of Jefferson bo. If I thank There is no reanstoffething

there as there is no one lives there, I to Would have to him a thought take horse & wason talso a guide I take food the of a camping out fit with me- aubber books + transector coat. In facto Should have these two slow Any one that ever goes down thethe goes to camp out & shoot bears & other game When they get to the river if they have a boat they cant use wars as the libes is full of can grain when cando They/ had no authority to go to the expense needs any togo Que without any mon Breferred coming on to there & sold down that were where the where boats go down bug the river, once a week.

The fact is I would like to funch this I of as quick as possible There is no pleasure nor profit any more that than Jame mething untable fol the light - It there is a good deal of hard work. But now that I have undertaken the lob- by want to carry it Throthe ma catespetory malurer I have besited no of swamps of what was out they themed out to be only reeds no one wer weststhere Come brakes except conceans to cuta fish pole. The came brake look exactly alike on the outsile of the swamps to an En no difference in the this except that the case grows larger than the reed

The Bamples of Care & got from around Stretter when only lot from I few particles get I lode a no of miles in a heavy raind along belt of Quamp & a weed that grows here over fifteen feet high when my fride who was mile got a few feet in advance of this I would loose bore the applite of beni Cane brake for mules aptin getting of my house & force with it it two out always to by only need any amount Come alon want for the zan

T. A. EDISON, bedate Keys. But I find there are no bouts (um benten the two places & I will have to come back the road? Came Please do notfail to write one in for Address care of the Tallahassee. 9 believe book need Rome More cliousetets , here to the northern Bart of the state I used my nationent & relieted out of the etion & was able to glean what & considered trustworthy information.

[SEPTEMBER 16, 1880] [FROM JOHN SEGREDOR] andes of the Cone with The Bear grass short flat plant with it at topog leas Brear or brue + Oro Z. From Ella bille Harida ments of Camples of Woods Co 0111 China Heatte vi external

Lot ho 3 tout trom Lake Co Concerts of the Butt ends of liv 17) Cample of Cane. It no 4 From Jacksonville Fla. visuals of hough falable the tentimade out a fly brish fibre brush no 20 - From Jacksonville Fla -LaTho \$ loverest of now Dample of the ruside of the Banna Tru-kroper - also I the Banna half also of the thefe that remo I different Bourples from The Bennie no 22 complet Tilly Quantonto " Egg Grass, grown in Routhern " Classola plumes Tousiels of what is no 26 as fir flout from its roug anywhere winter and of contract from

Insists of suple of through tree under utos , Polenetto, Etem con There of thrown as hide and the Celens of ground the Richard hot dis Thomacksonville The bount " In 3 ! cample of a plant Russia a down on the Bahama chart Sear Cir. It has been ranny books without stopto since I came that the state of was communed to clearly to day the agreement to day the agreement of has communed to char up to day. will leave for Inbutacello to might in to moved I liste to get don highland ande thing. Her I leave there I wild board them so sonthe into the gring of the state where wish you can aldress in the monteelles to the Post deforce I will leave directions to have of lower to me a of he author bloom the the delegran

Thems & grows the hot and Thomacksonille Ha bowet " In 3 ! Rample of a plant Russia of grow down on the Rahama Chart Dear Cir. It has been ranning handy without stopto since of come hitothe etale of bear commenced to cleany to day I we are having the agriculture tombs here now, but I les communed to clear up to day. I will leave for Inbuticello to might In to morrow I thought the fleave there I heave there I will be to the there to dought the along the chall where in to moved I hope to get down all the fruit ite from If you wish you can address on bax nowheelen to the prot diffice I will leave directions to have forwarded to me a of I heavel blog on the the helpraph per-Enumbered byt from the extent will you order any use the John R. Signiston

Jea Shind bottom Christo Jessamme Gine Dugar Berry Shruh Bullio Vine 3 Rea Johnson in & acoto eta

Bearing Weed or Bus Water 16 Wolvery Lynn 6 i ۲, 11 twooder aterit rance Tree Tree

testi Zurnbule

deaul. in baye to l

R. A. EDISON,

distroyed a very large lenving 20 Hamboo Voue no Rootset

T. A. EDISON,

Menlo Park, N. J. Lot 19. From the banks of Appalachicola River It 97 - Care from the large track of Florida humcrow other patches large + Comall that Ramples are about the Came Javerage oots of "the Blee "Palmette anche of Palmetto The brange Tree Blue Palitotto

112 Roots of Red Oak 101 Z. surknown wer Shrub hame weekwood 20 Tallabass no124 White hulberry Bar 1125 Ceculu forme 4726 W/27 she Bayoner 28

my Hotel expenses date from Arguet 29 molusive to bet. 4. Hotel expenses 3 9 day \$ 78. 75 Atens of House Hatchel to Cut cane Equide at Jusup R.R. Fare from Live Coak to Collavelle + return at Lake bites musgents blush for Cample 0 "50 barkins Grassis + bones 2 "20 for Lamples at Jacksonville". 1.00 Rostoff Stamps middle + Conveyance vice to Cemon place Ctamps

Lelyrams 1.00 to while Branch 1" Stamps Dlacis bisited Roach Plantation Lay lors Planetation abother one 2 R.R. Flares Ynouteello to briftont return montrello to britten R. R. France Dreftont Chaired . 70 expense at blecers 0.50 R.R. Have Chaires to Zallahassee 0 .55 Lallabassee to Bhattateorobee Rostope Clamps 2 ..00 0 .. 25-0 . 50 · 00 chicalose River the 12 " vo Both ways

Bhallatroochee handing 27 15 to Lallabassee / 2.00 espenses at Zallaharren 2 "00 Lelyramoto rece of there was very letter where I hadford Rostage Clamps 1.10 R.R. Have to Baldevin 6-75 Buldevin to bedarkeys 5.150 Bonts around bedan 2 " on R.R. Have bedar Keys hew york to ments Park 3 lines Reining about Possport ete efficie bars

Rattunore R. R. Kare to Phild-Phil - to Buttimore Hotel expenses

ch Jano For Forward This U. The virual he informed Fre their Your wanted him to go to India to purchase Poumlow, June now tweet = ing the death of my wife which is momentanty Expec= =ted and as soon as the funeral is over I shall be at liberty to go any when away from this placed as there will be to further Tres to bend nee to hewark and if you think that my judgment would be with any thing am

open for any thing no hear from you love matter what I am writing this one my knew and attending to her as well Jours Guly Gus pole it may appear strange to you that I should write you under the circumstances but anything for relief Leng wife just Expressed the wish that the should be remembered to yours as she has one the new one or two occasions and think very highly of her. If you work faithfully and honestly blease let me know as I have had a hard time of it for the last few months and am Entrety out of means hopeing of may.

"HALF RATE MESSAGES

THE WESTERN UNION TELEGRAPH COMPANY THE WESTERN UNION TELEGRAPH COMPANY THE WESTERN UNION TELEGRAPH COMPANY THE THE PROPERTY TRANSPORT AND INTERNATIONAL THE ADMINISTRATION TO THE ADMINISTRATION T

Mailed Damples.

John R. Leguden

11/Collect 1/2 Rato.

Ma 4. Pallahasse Fla 4/29
1. a, Edison mento Partit
Rego to wait money has
to come from Savannar
Send other hundred early
tomorrow that it can be
ordered cleans there same
Evening one & Segridor

THE WESTERN-UNION TELEGRAPH COMPANY.

ALL MONEY TRANSFERS MADE BY THIS COMPANY SUBJECT TO THE FOLLOWING TERMS:

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and an extract of the protection of the protecting office, and in such gase the amount received for services and tolls will be retained by the "Delgraph Company.

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NORVIN GREEN, Freident.

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Pace. Express of the sense transferred will be made at the principal office of the Teleprish Company at the point sense; and the transferred of the person is formity of the payor. The similar of a steparan repressing transferred may be sentilated as whome of the intensity with the parties of the payor. The similar of a steparan repressing transferred in the sentilates without on the intensity with the parties of the payor of the p

A. B. BREWES, Secretary. MORVIN GREEN, Prosident

The Western Union Telegraph Company, eived of WOLLAN Juffer Dollars

ar paid toll WI Degred W

subject to the above terms and conditions

Amount of Transfer, 8 / 00 Telegraph Service, 100 Telegraph Service,

otal, . . . _____ 103 70

Zallahassee arrived here last Appalacheola River the full light of the diver There dry amount almost of bour ough this river either banks or a short distance one them. The banks are extremely covered with water all the year round except morn The lever fall a lettle This Submerged postion Completely covered with trees of brush of cane all the waydom And extends from a furthender Wards in Some places to mile in others. The generality of the came is so streated (at to be lot fever in Louis form The lands are to low There is so much Browns

I mupely have had a return of the Lune Rind & had Un The beginning of the Pen have been ttoken saw the State bourner 101 Lands etc yesterday eve returned from arranging fra the the Count Therento, They have hever untro before. He completele ever been at is offeste the State bage

T. A. EDISON, 2 attoutette got me that would get others that has read an inventor. Such as the

I have been told by a my of different parties I and chargines quantities of care in George But they all cay it pust the Rame quality as the conque This state of The Come here is not a true Bamboo Of Course you know a large Dorton of the Damples Dent are not sent with They will expectation that auswer, But merely to Gover all the ground, + lehow Jan liver king. It is a great pety some skind of wood could not be used they (Lay to ank it clastic by ligh prisone waterd Steam, Only the steam of water when absolute alcohol, or come - ete This would give the work enough elastick would distroy after It Claville where & Stopped at some time ago of adio

T. A. EDISON, alluali you. It was fire'd with great sawdust The roleworthy part that Three hights List the flame went endening flues + finally thing x last over the Hop of brilers. My seemed to work first draught was Class. The got by murely, Murning a all quantity of lawblust was brought the sundust automatic apparatus is the largest will the present governon of the had a few runneles Conversation But a did not know then he was governor of got the address of a man who has been all through the West India through the West India John R Repre

T. A. EDISON, Central Hotel Tallahause Dear Pir Jam out here represented I. A. odeson mento Park new Jersey by reputation am Dearching for a rtane build of came that is used to make Just plant of come but more of the dequeste just If must be solid gramed + not parous Our borley gand me yo name & address & Daid y any men could give the the information of tought it would be you. He fail

you had been all through the west Judas isla Junaica etc. What I want to know is you le collect over having been any form travels among thes counds the of so where or y you have been any very tought pitrons plant to day them of there we your thavels Iur "uses it to make Ldison in elictuc it I shall feel greatly with the answer to they to him and Codison at men s & am coing to bubathan John R. Degredor



De Zana Fla Sept 29 # 180

Dear les . There is a specie of Wild can that gener in the

Rooth live of the Island of Jamason that is sold I heavy, great quantities can be had I think however you would some much time a money in cearching by paring strength off to the Rever Amazon, where every variety of Cames is reads grown bone years ago Bamboos were being chiffled from Jamason to hew york for paper mixings, but they wan hollow a come when split, difficult to compress, their bresiness was abandoness it them frent to Bright when a read was found that was sold, a affect to be supposed on well.

Answer to a letter from JR Segredor

Upsala 25 th Sept. 1880. la Awden Japt no 8 To Mr. Edison , Ly Mento Sank 16 S. Dear Vir, Taka the liberty of beggs you to find me some scientific recently published by you. Being occupied with The publication of a Treatise on the modern theoretic principles of electricity, of have sheen obliged to enter upon a critic of the Theory of Edland, who asentes theses electric current to a circulation of the free other contained in the circuit. The electromotoric force entering in the circuit acts similar to the heart of the human body, compelling the other to flow though the entire cercuit like the blood in the vein of the body According to this Theory the Sames quantity of electric fluid is always employed in the same cincuit, the intensity of the current depending

not on the quantity but of the vilocity of the other. I wish to point out, that There may be another possibility. If the Current is easied by chemical action, vig. Line and Supplimie acid, the otherest layer enveloping the molecules of the metal must be destroyed and the other, thus set at liberty, may be obliged by the electromotoric forces to partake in the circulation of The Current, in which case an accumulation of the electric fluid in the circuit would take place, The dentity and also the pressure of the other augmenting consequently upon electricity of recently found that the idea of electric currents of high pressure has been into. duces into science by you. Not being all to procue the original papers, I must be of you this favour of forwarding ...

them to me. I my wish to tomble you for three prapers, wherein you have treated the theoretic parts of electricity. Journal invisional mile and my be of the greatest without to me, but will, as a hope, estentially promote the accomplishment of my task.

I remain, dear fin,
you most obedient bereis.

Dr. Alto Settenson
Docent at the University
of Upsala,
Sweden

Pous act la Ala Sep 28 121880 Mento Park So Bows of 21 - unstrud of my "fishing Rod" I think it is sather above 1 the midium Eize, of the "Red Rever" Cane - The founds are Shorter at Longe End - The Tample and you is a whole fint you will notice The tissue hiside purhups you can put That to use, I also Line you a small price of on native cane aln cut off of one of my rods. The Sample of Bamon sent you was purposely hilled out as the most dreayed - I can guther use about you by Esper of Frat Land 2 to 3 in diameter of you can un I The cost to you will be very little outside of freight say 10 km cartage of preking up I am with a Scientific man mer have I much

of The "filthy Lucre", but if I can be of any assistance to you in non re learches call of mi a I Though of There is to be a dimund for the came wrong like to have your frice for galling . Some before your Settle on giving The contract out - The Rodo Dell here at retail at from 20 1 4 40 grack according to Fize (Heave you com shings of making The frican of a showing tram of care inful trans Lighting than I) If our care can be used they are plintiful. Ihmed I with Sind I wym - or in fact any other shieres which comes anyway nous my Idea of would you would oboses The come have to be one in sianne partir igm use it in storps ? Im R Parry our, The com bane I cut The fruit is too so as dalo Lind you a print- (the smallest) of a There's of Garden came propogation from roots. The grain is fine and may aumer you purpose of Carce is Large morigh.

Lew Spanish Censul Can't do any thing without and letters phowing business quantino here against Knywist Geror There. Havana better come go from menh quicker there mire certain. Im R. Signider 31 Collect 280 7 240 Via Lake dies KyJ. Passegridor

Gedar Keys

Florida

Cell right T. a. Edison Except Engli Palentone

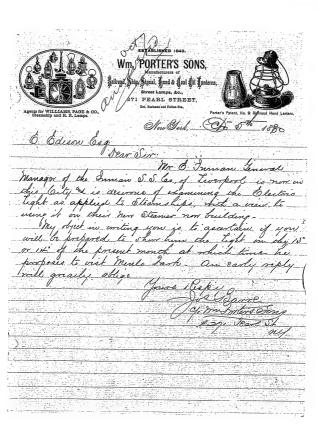
Miss Baberok of Willow. Please Javor us with Setail-ostinutes, to some in Estimates for our various plans. Lorg Rollers as planed by Jou to g, inside of 21 It front, I time of telbes, complete allo two of the same with Economic complete, exected in Now Jork on the foundations fermished Trampipes to Engines, Blowpipes telowers, Jumps, Elevators, Evalbushers and Stacks to be estimated all seperately.

PLUEMER & BRAMWELL, GENERAL OFFICE: Sales Agests No. 417 Walnut Straft, CINCINNATI, OHIO, Philadelphia, light and

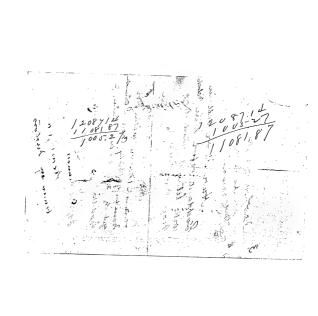
T. A. EDISON, at a hoiler pressure of 120 lbs pleaseship one to me mediately, by truly of I & Chison Tour calalogue does him Inform us at whose boiler pressure and cut-off your extenuet the horse-power This we wish to Know

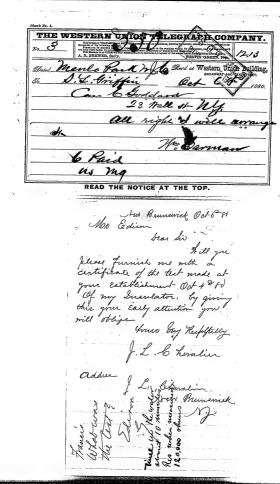
of Lamps an New York, October 19, 100 I noticed on article in The of over City Assochopers Some day ago in which it was stated that you had firether a description of your bleetre wight System for a monthly magazine but I have forgottom the Problection in which it appeared. As I take some interest in your successful adaptation of the light by Incardament (which is the only Lystem that can be of any real bone fit to the Public I doing to send your article and I first be obliged if you will mention, on the inclosed Lordal Cand the Aublication of which I confind it

T. A. EDISON, Made the Bey Glass Glotes for Stroke Supposes of he cam make Chat as are used on Coal Oil Lamps. A argand lawner - ME Ohall Mant them of special pattern - Will furnish Sample.



Huve Morre call in Jon Goddards before there Oclock with letter of introduction of prome on Edison Have arranged for letter of Cudity you wish fire founds there wish fire frame of the mind the get it my address care of good and food and 39 paid





N.13 you never a deman by " The Habang MHG 180 My dear Edin My wear course Switigm by but mais enclosing of 'se which Smeet for have per all right - I could you by the trapped & Come - by the Whitist chies are male cases which have been all 2 months dried in the Sain the short greenish piece was But on the 2nd hov. and has been 24 hours in an oven at 180 F. I have some more Complex Cut and drying male & famile, the finale Cane is hery doft & pape and Year will he weles, Captain Baker of King Rindly has taken charge of the Samples may regul here - Sehell and for the test of Samples of borrds by heat mul, The friend day Tohn I. Come here he presented me with a book "Present on The Sclephone" I find it has your name written in it if you require it shall said it on if not I shall feel obliged to you for it - In my last evension I found desiral beautiful files Whide will are lunge martites here of they much In Some land mon a few one is Pina to Patien which is as fine as sell to per white & throng - to fund of & all friends

Received from 7 a Edward Any dollar money advanced by mr move for expenses on Bamboo Harry S. Morro

abond with & Boot Mingt Co 28 Cliff Str. New York. Gent's Ox Oct 10. Enclosed find the general plan of placing Boilors in Building to Suit our other requirements, based on proposals of yours. It would be asvisable to place Eco. nomizers in the flue from the Roiles in Basement any Eaglestions of Desirable changes to advantage of Boiler settings and their economy in this case, which may present themselves to You now are solicited. Please give information with estimation relative to Geonomizers and how to aply them in this case

By the street of Mines, 275, 15 or Becure Colored of Mines, 275, 15 or Becure Colored of Mines of Secure Colored of Secure Colored of Secure Colored of the 1893 of Market of Ma

Ext & Copy of letter within let 12, 80 · Do for State of the Tetterson hermand the of wind a few of the Zue u that cell campat 62 insuranced by morround the size of the present of the word better treatents Ele, bus of we Conniet with the compant or accordence them the bumps seaper of oxidation is raised في وقد مقلم مو وهد و ودرو som the zwe placked finet ecce, Then their one web-ations set up wheat have higher rates as evaned be che cand if (his republy of the oxidation of ren love your

F.L. - Anduction | . | (601.12/50)

your Commencement of the - read - 9 have never processed any propries The second of the way () an occurred my work has been mostly processor . It is true (Gal Them into Dura) . Che cont. provide of El Trink, uncert of Electronic linguist for the remain that Office the College is a Com four Complied in a to whole meaning and hammen and Granuse pressure to the praper term

In my practical cook That Champtel out or Cam theray of Electrating which I convedued the true one and all my results have been oblined by and of the thing columb is the surply this that, there is a current and. this Current Dan have to valouty war and ar decreased by a quality or leaver presone; that. the Grant That if of odienced to

transfer tombers a millim foot lbs of Evergy from one point to another ten melisapoit that a cum to of white wood know many be used and the conte transfermed by maraon's the Volocity of the make As an analogy Than wood the ellestation of the hammer on of for a better to bother band from an oboft of to have the If we consider the organist the Galf to occured the count of the Valoresty of the same though

presone. then it is seen that of we use a band I fort wide running at a uclocati, of 1000 feet per minute. culd may transfer say 10 horac pamer of Energy wholes of. we use a GECT only 6 washers in width and a yel aly of 2000 foot per merculi WE can transfer the 10 hp of energy so we may continue weaking our belt wite. and incleasing its valle agy until it is a thin as a Dugle spider web. 4 stell hather the 10 hp. Harris Cools of the P

. The power transfirmed depender Enterely upon the number of ognare inches or units of belf suface passing a given pourt pe minute, so with Electronty the weakest Cuit and energy prisons Englos can be transfered over the themsel smallest cardida by moraving the viccocity of The Odne by maniaring the prosent. so that a questi number of units shall from a some good in the owner in a given time? -. I have never used the Other in mytheories always considered that all complete of Energy

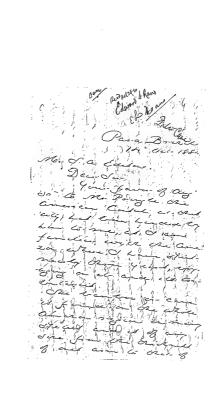
u Every form could be Explained by vibrations of matter as well-and matter to matter although of Estime lightness Come & 6. Cransfer d. Through denser matter at the Enomious belockly at which Elichary flows of cannat Concern but concidencem it haumissen by orbration origravily. The oxidalian of Zinc in the air produce. r brating of Cight, The Oxidation in a Gallery hust 6 to the same only under sufferent Guditions

hence there must also Gez vibrations, These vibration. must necessarily be down. than that due to the rial and hear of Cowert refrongestily - - 2 a. slow oxedation International of new of we add a coll the comme to gland stome Bile Res who by means of a run menor from that the light on a greater title from a British of a great mater of calls

If we take a single cell. the regardity of oxedation afthe Zue un that cell cannot be increased by increasing The sign of the plate or by the use of better Excelents Etc, but if we Connect into the current a seemdcell then the lange propedity of oxidation is raised by the action of the other cell apar the zmc of the first cell, Then there are orbitans Set up which have higher rates, as evaldbecke case if the rapidly of the oxidation of Zuc un air was more ared bysomo manis; very buly your

Tak

Department of Public Works Bureau of Bumps Vyces, Room 21, Lity Hale I will be glad to call on you, at meat , Dreak rock, on Saturday afternoon, next, ELECTRIC MERCHANDISING CO., 76 MARKET STREET, Chicago, Sct. 14 1880 de. a. Edin Er Beat SJ ; Will you done me gene interest and I ceres le





Commence of the contract of th

May answer to the rote of dever from the last of the l

48. South Street New York, Och 14 1880 Fear Il Friffin Several friends of mine. are desirous of seeing My Edison who bleching light -I write to ask you lif it would be agreeable to him if I should take them up to Mento Park on Hedresta, evening next, 20th inst. -Please favor me with a reply roblige Long huly A. Mhave a letter from

our correspondents at Pla Jane's saying that they mould whend to the Bambor sample immediately. It seems that the came is to be obtained from the interior of the country.

T. A. EDISON,

Menlo Park, N. J., Oor 12 1880.

Received from ? a Edward one hundred & fifth dollars on age of leukan buch

John R. agredon

here I have been the look out for Bankon but have been small to find any quality of I went on board the has first arrived in port, saw your machines

Palace Hor a Columbia Las -There is a fair sh this dity with talked are favorable to (2.7

depting your exeture of I have been informed that the sailing vesselle which she between here a taken off dur the. employed on this court be oblind to Japanise are very trick will be as will best stock banishoo aguite but I will better how the la when I git on Bamboo San cos do split

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de son as for the some the some to about the place some to be a part to place some to about a place some to a place some to

SE CEDAR STREET

New York, Och 188

My dear Edisin.

I have just made a (to me startling Fisavery. In working ont of the window of my office, I saw directly opposite in a room in the Equitable Building, planly visible from here; persons making This Electric light Even I write Leater at my lend I can see and There do no south of it, your Vaccinin primp with a your Man working it and your lette lamp they tring it up to a

billiant in candescence and then with a operit lang seal the lawf, exactly as yot have seen it done in the laboratory, I can see the of shaped carbon as plan as I am set this paper. On nathing the Dis avery d'immerdiales, and my Byokkeeper over bose What Kind go place it was. He cam Gale X reported that I well the agrice of the U. S. Chetic high bleo ... Dedyn Knew This If not want it of some impertance by you da

EXECUTIVE OFFICES

/Thbemarke Hervilizer Company,

EDWIN M. FOX, SECRETARY FRANCIS W. JACOBS, TREAS. sure it is a clear infringement anyum hatents Lorning and of the window oran, I can see four little lamps in a room gradually being hongabufo to an lander In one Comer & the rom is a Clar pipe When a man is angused as make the Tilles There was or 20 people in the room

in shirt cleeves, seem to be handing cerbinized film prist as I alive seen Bachella do dundred times. The four tamps are now at a " Brille in Candescence . It is no Know about this aonse you to look into it . The Whole sotablishment is directly street intervening Why in the name gave hat good dent you reply to my letter. I have with Tim two . are you coming in to newfork American Setteral : If not Can I have a lan late with you man you on Surlay. Pear totage

Phila oct 2325

Mr. Thomas St. Edison.

Dear Lir.

Treparatory to an intented visit to you, I would inform you, in advance, of the purpose of the same What I wish to discuss with you is this : Would you agree to assist me (as a partner) in bringing out a magneto-electric machine for generating electric currents to be used for electric lights, telegraphing, electroplating x a: This generator is intented to excel all other generators now known in Europe as well as here. It will be constructed in thick accordance with scientific, mechanical and economical principles, in such a way that a steam or other motor will produce, by it, the most possible current. I have built in a rade way a small working model of this generator, and my ex-. pectations of it are fully realized This most efficient generator, no doubt, would enable you to sell electricity to consumers for a great deal less than otherwise you would have to charge,

and still have more profit left for your com pany; the lights could also be a little larger than gas jets - all these advantages would greatly assist the introduction of your lighting system. But what other profits could be realized by the monopoly of the best generator "! This generator will in Europe be just as valuable as here, and ought to be patented there; also; but that requires an oillay of money greater than · my means would allow me, and so I have to look for aid . I thought you to be the right man, as I know you to be, in the highest degree, capable, enterprising and trustworthy, and I only hesitated; for a while, to make you this offer , because I feared that your just ambition as an inventor of " such world's renown would not permit you to associate with another inventor (and patentie) . for the purpose to accomplish your great enter-. prise - the adaptation of the electric light for domeitic use. Thould, however, the interest of your Congs. be of higher importance

to you, then, by assisting me to construct the most perfect generator, you would soon be able to give to the world the light they have so long been waiting for , and give it cheap enough, too. I am certain that a personal interview will sallle things all right, and request you to let me know at what time I might call at your place, or , should it be convenient to you, if you will call at my house.

Expeding soon a favorable answer, I cemain

B. W. Well (material) 253 South 12th A.

Thiladelphia, Oct. 23, 80.

· References (over 25 guis): Seof. Chas. F. Kroch, Stevens Sartitute, Hoboken. R. M. Muskle, Manager of "Public Ledger", Philis. De. Mornity , Publisher of " Philis . Democrati" .

9. 9. — Our state in your exticle in the "Morth American Review" of October, that you have adopted "dynamics" for "magnetis"—that is to say; you have, for the unha of final suiveles mustificated botter generators—which markets me hope that your will adopt the best of the generators, especially if you can be come partly owner of them.

Then gan say in the Neview that the amount of elactricity amounted in each house will be sery itered by a vort of mater. But that registering mater described and illustrated in terihores Manthly of Teterary, will not be paractical, and I feel quite cartain that you are of the same opinion now. In my hiswer time, and for amount sake, I have worked out the idea of soul a mater that will perform its but faithfully must have replained of provide of mild and willows qualitative deposits of mild and willows may the involved amount against the same. The principle involved would also make an accollect galancourte for would also make an accollect galancourte for

other use, working in about the same way as a bacomater, or as a stram gauge, by pressure. I gan would adopt this mater, you could have it on your own terms.

You further say in the "Neview": "Men are being trained to execute all the details of the introduction and working of the electric light sysem " - Now, even in this respect, I might do you some service by offering for your employ two of my () sons. (21 and 19 year day one now employed as a printer, the other as assistant to a chemist), both can use their hands cleverly in almost any kind of work; the older, especially, is a good draughts man and passionate amateur-cabinetmaker (he made for one the Patent office model of my generator), conceives quickly and thoroughly any kind of machiney knows a good deal of electricity, and can speak and write English, German and French. No doubt, you could well utilize his talents. He dislikes his trade (printer), because it does not afford him opportunities mough to exercise his mental faculties.

The beother might be useful as a clock, he write in clear manufactured) and presence other good qualities for such a position; or he may be positively useful for interdiction or pushing things through, being in as uses limid or opaid of anything, he has for a possessing manners, and, where cagained, can use his tengue very lively in Confeth as well as in Jerman. — Bill giving more do not know that I write in their behalf.

. wish I he was the roll

It offerds me grant-fileaure to inform ups.

Iteal was grantfaller ides treefs a stationary store, is reg

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are the first first further. We don't spoor station told

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would, also first of great willing to my soughners in

Making sungerby that formarches Blease, thurtfore, to let

oney master slow dill. Hell mailt.W

19.80. 25.2 Bowle 18. 19.

So The as generative is to man who supply from the state of the supply from the supply from the supply from the supply from the supply for the supply the supply the supply for the supply to the supp

is, Irras in hopes of all them before the last week

be able to gather for the bet me have one or two only for a week or ten days, I should be greatly abliged, for I am new decision of making my collection an attractive as Hoping to hear promably Touly Mr. C. Iblang. Mit in Physics

JOEL SHARP, Pres's.

S. SHART, And Sup.



Buckeye Engine Company, Buckeye Engine Company, Buckeye Engine Company,

BUCKEYE AUTOMATIC CUT-OFF ENGINE;

Mist A Edison Gol. Co., Ohio, Och 36 1881

Mento Park A.J.

Me see by the papers that you are going to balifornia next breek, ban you not find time to stop over a day or train at Salem? We will need the promised drawing of a "dima==mo" machine to which the engine is to be attached if we are to go on and bruld one, but begides that there are other points on which a little consultation with you would be to our mutual advantage.

Me have a plan of engine now mearly perfected which is a modification of the regular automatic so far as celeties to the balus and gear, the former being both light and easyworking and the latter consisting simply of roots passing air out from small ecentries to the balues without the intervention of posterostates. To get eccentrics as small as possible (4 in) they am pleased on auxillary shaft

Havana 27. Edison

John de ad vomito Telegraph instruction,

Butter

Bury him my expense.

Play J. A. Edison Rends Park. 27-160
Play J. A. Edison Rends Park.

They dear sin, Jan without any of your favors
or reply to my letters of the 6-1 13-1 - 20 hel
or administed of damples deat to hach Shape regular
your Share some more thanks schall land formers
when I have forme you hastered of leading to
me on the Round of the 4 320th, place paylot
hits the Benkhy house of mess Plack to of
her first who last your your a reacyst this will
stake my the house of all of sharing your rece well
hith regards to all of higher your rece well
hith regards to all of his house

Jennaire Jones bruke

Habares Oct 28- 1888 Prosenor Thin, mento Park my dias die, I tely you fecteday the death of poor John Segredo & rec your reply which inmed, which to I delayed the bound & Rept the body on ice thinking perhaps that his friends onight wish It, butalied, Ifed the despert regret for his loss though only a recent acquartance Springs him a very good fellow or most encycle them In his endeason to larry out your ideas or would & some his arrival I devoted all my hime to proces his reliebs tymes & during his illness I may day I hear left him & did & had everything done for him that was possible, I had the two beck Physician (yellow ferry) in Habana & Burgess & Doctor Belot, also a first class nurse and a man to assist, no expuse or house a affection was speced I even called in another Doction Almiral and before he arrived John has dead the doctors declare if one of the Senach & mon birdent Cases the have loss seen. and day that he was predisposed to it from having Suffered from Malicia & positruttes also from The fact that he was constantly taking lecensar Roser of Janine (Lulp), hi deposed himself meny much to the Sun and lat very heartily both against my advice on Nathhday after Emplishing his Encependance + believing on bour the Steamer Morport" a sweeking Bird addie to you he came to dinner with me & appeared hery will lating hearlify, afterwards he came

With me to the thester, and Sleph him at his door about 10.30 fun dunin time until hid time be drank to blussedes and a kottle of Joda Water, (he was Day moderate in druck taking nothing but a little thing and hazer been I where he was talling long bold drinks I cantioned him, but he has a special temper of his own, self willed & invaribly did as he thought fil; at about 3 a min dunday morning my servant talled me stating that my friend had sent up a mercujar saying to was being ill, I steeled immediate, der him & unmediately brought the Dieter Burgers, where Case and attentions was beyond everything hearting there & Some hims four lines a day , he declared it a very since the set most madegant brails of pour the beginning gave one very little hope, but search the worse the case the more Care + attention is required - Sprocand a first note english spinking hurses & a hum to esseit, I took Muje & gain wif my burners & excepting & remained with him all the time only getting encor two hours of Sleep tack high to the their told Buyen to hear a Consultation to Called in Relot who is The medico of the John from Hospilel - after wards Lasked for pesh Consullation, he Called No Aliveral - to before Stowne Amind for film was gone - at about 5 of one Wednesty Mirring the doed being trangail and without pains of Mira prisoning Sued not repeat his defferry but of if it any Encalsteen to how I his friends of he have provident of the States he Could not have received min attention Kindness talledical attendance nothing was special, let alone the regard stand for him + Convince Charity & trasidired you also to This matter

Kaning Col & Buid in the day the

when he died Shad him put and I telegraph you as Stronget perhaps his prinds anythe wich him in balon to me nech of your reply be bired him, very decity some friends of mine attended and that the Spirafil Senter red by he Betanound of the American Constitlate -Shit a him heaven & Castlet mourness to Shad a quest fres with the people in whose house he died, who forced in to like the body away immidially and Charged me for the bed it bed elother while they also Acitros, Mr Retaricourt of the limentale lunie to take " are mountary of his effects which Sinclose you & will sind the Valine by M. addrined to you -When he arrived here he deposited with me Floo in american gold price which he dreed 40 in two payments, and on Laturday \$25 for a Bird -Maring in his heads 35 Gold & I found in his portest after he was taken ill Is Gold to 115.25 in Spanielo Riper. Which dans Ihrac placed to his credit in the general ye, Sinclose The original receipts & documents, buch as are in spareite paper I have reduced to gold & Show Throne you at your enrich announce to remis The Lance There were some samples of basis White he cut but is they were dirty & infected with Domit to form being under his bed Shart them - Millioned Ishall Sand you lines diplicates as som as Some time out to cut them he had to fach Things & ace whole Shave Kept Mo deplaced perfectly to me the love & Llyle of Care you region and Sikell look it up I shak have Cut & dried in the Sun also artificially -

I Am very corner you don't out To his Segredor I could have dive all you require, I don't think the Look would think it worth his while to Kill nie you remember I was so strongly under this unfor that loffeed to go up the "Attato for you - make me a fair appr & I shall take any risk-It Balchela & mac that I cannot forget that with June joke I made in my note to them of my seiny from John Through the mill " I little Thought when I wrote it, that it would prove to sally true, however my Custime is perficlly at the And Jan Sure That neither his father Brother or Undest friend Could have heated him more Kindly - or taken more luce of him, beader Reeping him from danger as much as was in my power I have past these fine days almost without rest & in miserable anciety & I felt so ill yesterday they I began to Think that I was in for a dose of firm So much so that I consolled the Doctor & look medica Sam better today, he kowan heade me have my clother to avoid infection - so those him physic of famigated of bathed, There is much bornito here at present and Cases late in the season are much anon fatal than at any other time, I lost too priends this mouth, John is the third -Sand one out fell webrections and I shall they & falfill & Carry out all your him of brods of the Seland all differed therica they here affered to the Bulish maseur for 50,000 it is the takone of a life of 45 years - every the on the bland trucking true and the with core he might buy therep

this me part of the Colletion of a Celetated both Received the Bicca are Small about 3 mile buy 3/4 mide Think & spirite - policies on our dide to choose the gram each 11 morrhide bolgmens have so . I think come be ha 4 6 5000 - fill, Istall be glad to hear fines of evon and of Jane Leve for Satiste his to Inch you long lucies in all your in Philest Regards to lund Ball Viten to march the Town dont Cherry lo more fatel There at may after in & fall il + carroy out ale Lichery Steller States and hope to the Low ling free of history of the John I'm to the front The offered to the Butter Marine for Topped it is the to some of a live of 45 years - lead the on the Stand

List of effects of Mo John Segreda who died on the 2 for of actober 18/80 of yellow lever This inventory is the en in presence of N. H. Butter and M. Lawrence Betanchert american Consulate of this bort. Havana 28 th October I one leather Valise containing as follows: 5 Live shirts 2 two pair socks one som le one pair sus penders 4 Jour hand kerchiefs I two other pair socks. I one Smith & Wellow revolver I one cloth coat 1 one box cartridges 4 four books 5 five black cravate I one broom brush 2 two boxes collars & paper Various sundried consisting of note be rayor, shaving brush, elactic pencils,

SOUTHWARK FOUNDRY AND MACHINE COMPANY,

The Porter-Allen High Speed Steam-Engine.

Description of the Country Williams of the State of the Country Williams of the State of the State of the Country Williams of the Country Williams of the Country Williams of the State of

156 Phila nor 30-80 Wirlutio Taylor My of Ances, which must please brenghody whose interest is not upposed from your laticle that you have Hot made your barnon chamber moretable. If you will pardon

, the Englishin I will day that I himle in possible to make a joint Must shall be figherthy imperturns sale presence of the later allows free expanding and contraction of the party, and without liability to mmicate with you farther. Respect Win burto Jaylor

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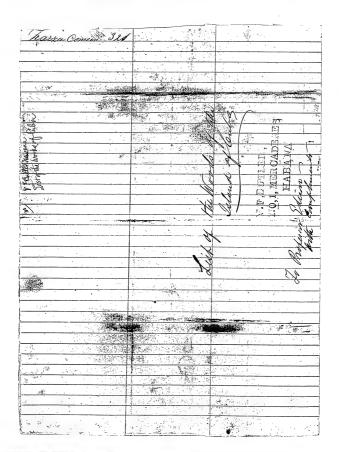
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	Maarrobe	//	. 6	Copey 83
	Minendre	12	Cafe 16	Lehilled Loma. 84
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	Mamo Jaque	u 64	Canistel 49	Cirio 86
	Alliles 1	. 15		
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Guacamari.	130	Pasmin de punta,	Sorda	Hamoncille	201
Guagannostase Corta	131	Pacuma	160	Hanate	202
Guama de Costa	132	Raqua	168	Hangle Bick	6.203
Quanito de Clieria	133	Jaguri.	160	Manzanille	204
Guano Cana	181	Payajabics		111 1	205
Guara de Ley		Laimioni		Hiraguano	
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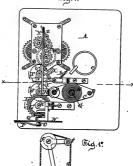
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B. F. CARD. Meter for Measuring Electricity.

No. 223,112. Patented Dec. 30

Patented Dec. 30, 1879.



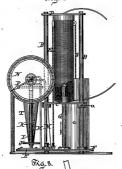
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B. F. CARD.
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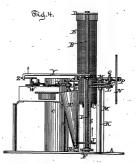
Inventor. Benjamin Floar

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B. F. CARD.
Meter for Measuring Electricity.

No. 223,112.

Patented Dec. 30, 1879.



Witnesses. Junio W Freet Inventor. Benjamin Floard

UNITED STATES PATENT OFFICE.

BENJAMIN F. CARD, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN METERS FOR MEASURING ELECTRICITY.

Specification forming part of Letters Patent No. 223,112, dated December 30, 1879; application filed December 14, 1878.

To all whom it may concern: Be it known that I, BENJAMIN F. CARD, of the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Electrometers, of which

the following is a specification.

The object of my invention is to measure or determine the quantity or intensity of electricity by means of the mechanism ber

The invention is based on the fact that a bar or rod of soft untempered iron placed within a helix through which a current of electricity is passed will be drawn within said helix by means of induction; and it consists of a helix and bar so arranged that, by means of induc-tion, said bar will be drawn upward while the current is passing, and this motion of the bar, by means of mechanism hereinafter explained, causes the revolution of an index-arm over a measured scale, the speed of which is varied by the position in which a friction-wheel is brought in contact with a friction-cone, as will be more fully explained.

The construction and operation are as fol-

lows: the accompanying drawings, in which similar better of reference indiento like parts, Figure 1 represents a plan or top view, partally in section. Fig. 1s shows the arrangement of the balance-weight. Fig. 2 is a front view, partally in section. Fig. 3 is a cross-section in the line X. X. Fig. 1, showing the bearings of the cone. Fig. 4 is a site olevn-bearings of the cone. Fig. 4 is a site olevn-

tion of same. Highly seemed to the base-plate A are two metallic standards, B. Used in connection with these standards B are the two bridges O and D. The bridge O is made so as to slip over the standards, and to be placed at any required distance from the top of the standard, forming a shelf or rest for the helix S₁, and is adjusted and held in position by set-

ring of sufficient size to admit the upper part of the helix, so that when bridge D is placed in position on standards B the helix will be held firmly in position. In the top of bridge D is a hole that allows one end of the wire of helix E to pass through. (See Fig. 2.) Sliding on the standards B is a metallic plate, F, on the upper surface of which rests the iron bar G, which is made of soft untempered iron and does not become permanently magnetized, the upper end of which is brought into and slides within the helix E. On the lower end of bar G is formed a collar, which is loosely or our G is formed a collar, which is loosely fitted into a piece of insulating material, which is rigidly secured to the metallic plate F. Also secured to the metallic plate F is the kneedleed H, which holds the vertical grooved shart I, to which is secured the friction-wheel J.

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have an equal bearing in whatever position it larve an equal bearing in winatover position in may come in contact with friction-come T. This friction-wheel J, being carried by the plate F, parakase of the motion of said plate F, and honce the friction-wheel J is brought in contact with a different portion of the friction-cone T accordingly as the intensity of the electric current varies

and is adjusted and held in position by sections of the senter of bridge O is a hole, around which is soldered a hollow those of same close? Which is soldered a hollow those of same close? Which is the higher of the house of the holls in the bridge of the holls in the higher of the holls in the higher of the holls in the holds in the bottom of the helds in position. So the most of the helds in position. So the most of the helds in position. So the holds in the bottom of the helds in position. So the holds in the bottom of the helds in position. So the holds in the bottom of the helds in position. So the holds in the bottom of the helds in position. So the holds in the bottom of the helds in position. So the holds in the hol

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cured the train of wheels W, and so arranged that the gear-wheel X shall engage and actu-ate the gear-wheel U of the friction-cone T. Secured to the knee-piece H is the rod Y, having its outer oud crooked or but down-

maving 188 older each crooked or bent down-ward sufficient to come in contuce with the re-volving arm Z, and performing the functions of a stop. (See Figs. 1 and 4). The spring b, one portion of which is attached to the yoke ZR and the other end to one of the standards that support the train of wheels, serves to hold, the friction-cone in place and equalize its bearing.

Secured to the base-plate A is a tube, C, of sufficient size and dopth to form a receptacle for the balance-weight d.

for the balance-weight d.

Seemed to the upper side of receptacle O is an upright rod, having an arm holding two pulleys, f, over which a cord, g, is passed, one end of which is secured to motallic plate F, the other end to weights d. (See Fig. 1.) The operation of my electrometer is as follows: When a current of electricity is passed through the helix E the iron bar G is instantly

magnetized, so that it is drawn up into the helix E, as shown by the arrow in Fig. 2.

This action, in connection with the weight d, This action, in connection with the weight of accesses the metallic plate P, with the attentments, to be ruled up, at the same time removed to be ruled up, at the same time revolving arm Z, which are volves to the rise of the result of the

In the example shown the train of wheels are operated by the actions of things; but I do not wish to be understood as limiting myself to the use of a train of wheels like W. I

may use any other motor, such as weights or like devices, or electro-motive power. What I claim, and desire to secure by Let-

ters Patent, is-

ters ratent, 18—

1. The method of measuring the quantity of electric current by eausing the same to pass through a helix, and thereby operating a movable bar of iron, said bar of iron being connected to any suitable mechanism moving an index a measuring and the same and and a suitable mechanism moving connected to any suitable mechanism moving an index or measuring arm at each moment with a velocity to correspond with the inten-sity of the current, said mechanism being act-nated or put in motion by the movement of said bar, substantially as described, and for the purpose set forth.

2. In an electrometer, the combination of the helix E, the movable bar G, metallic piece the heax B, the movator par G, metallic piece
F and its attachments, and cone T, gear-wheel
U, and grooved shaft I with gear-wheels L and
L', actuating, by means of the movement of
the rod Y, train of wheels or other mechanism for obtaining a regular motion or revolution of the cone T, and, by means of the frictionwheel J on the grooved shuft I, transmitting said motion to a suitable index mechanism, substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of December, A. D. 1878.

BENJAMIN F. CARD.

In presence of— Louis W. Frost, A. J. KENNEY.

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267 Washington Street; Boston, Mass., Hew 16 I suchose hirewith a rough skitch of a plan for Electric laws. In way have already tried the Dame thing or may Know it to be worthers wietent trying However I will venture to sent it and would like to lave for test it anders for done so before. I Rent for a Similar Sketch last friday by mackengie, The work day he required the fice to test it kinself but fearing may not do it Effectively I with direct in regard to it. Very July A.

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Dread, Morgan of la.

POBOX 3030.

New York Nov. 23 1830.

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my/dear Edison Your letter of the 33. is at hand this morning The eftract it contained is only another example of the worthteepress of newspape reporto just as in the Herald made to criticise majim lealing up his lamps with lealing wax Really, however, I wish very much you would go and lee majores lamps was entirely aceptical in Lit I law them; and then I was ger much Our prised

I tell you wall frankness, one of his large lamps. that in my opinion, the mette. od he has for making his Carbon loopes, consolidates them and gives them a won derful resisting power and durability. He has run them up to 60 candles for an enhire month and they, are still good. In morton's laboratory we measured them at 80 can aleo on the photometer, and at Trapers we got 100 candles from each one of eight lamps for lix or eight hours consecutively, One of mapine large meandescent lamper ran to 650 candles, photometre meas. irement, as we can in Hoboken. how making loted me that he had obtained 3000 candles from

Now of have never been such resulto as these in your labora tory, nor have & ever leen any rone who has even them there. One of your newest lamps which morton had at Hoboken, and which he lighted up for com parlow, would not Dam eure. Professor loning agreed with mo that your lamps were not in lended to be run above 16 to 20 Candles; and that you had not been able to maintain on at 50 candles for 24 hours I am fully aware that in all this, Inot fully posted for I have not been in hairlo Ruce the last of July, But you remember that I have asked for lone of your lan and have been refuseds Now as to the Evening dos

On Friday, the 19th, after the ad. fourment of the academy, a reporter for the Jost asked me what & thought of hm. mafine camp, & replied that I was of the opinion that his mo improvement in carbone was a great stipe in advance. That my friendslufe for hor Edison led me to regret that he had not been the one to but upon the new mettod. That Profe Draper, morton, and myself had tested the lamper to our latisfaction and had obtained candles by measurement one of these carbon loops, & we this is the Substance of stated total him. He took no notes but wrote it out from memory evo. dentity; and a poor memory althat. el. hoston had the lamps + morted ofra 12rod to his laboratory to kee them 2d, of laid not one word about any letter from you to Draper, for there was none, 3d, not about effets to test the durability, of your lampe for we made none, 4th hot about the title of the hafun lamp which are all wrong, oth hor about your lamp beingold wenty years ago, you will therefor bee text everything you can properly ob

to in that atticle is entoneous. and yet there is just enough of truth in it to make it plansible of you desire o will write to the Post and give my efact opinion as a have now given it to you. as to priority, how. maximes patient shows that he filed his applicant tion for any incandiscent carton fil ment in a hydrocarbon vapor as early as Oct. 4.1878. and indud from mr. Twan o lecture in the last Chemical News (which we recent here on Tuesday (last) it would Dean trat an incandescent ament of carbon in a vacuum was used by him 20 years a The Generary of the U.S. Clear old Vale friend, asked me if my business relations with you were enchas to prevent me from make mg a leries of tests upon the max in laufe, enchal & made upon yours I replied that there were no

business relations between you and myself; that our relations were those of personal friendships. That I made the tests upon your lamp without bias, Rolely to assertain racto and that I supposed yo Could have no possible objection tomps When these water com Pelitid, I chall be was condition speak more intelligently upo then efficiency and economy, & a care to Jurnish me bonie o best-lamps they will he real lest with the be honest ever with a the yourself of an in error, I hope not, it is not the part of f Chip to conceal from you the facts and lead you to believe better o your lamps than the facts was you an injustice Cordiall

United States Internal O Enclose a sample of Jelme minuel which has been reduced for it antivil state by attrition - In one stay of the parcels of managastur it is viz februs - It is of the chalun of askes to an Contry toth - It my from of come online to goon although Than an doubt a material similar has before the hen called to your altertion and you have by the time uphenetie in ispicionet congetter, in the minul line The article in the My Time they morning has called any attention to gam efforts in obtaining a Carton - and as I an manufactury the article for paper waker in large jumble Maple it mus as at bein tean

Dear Sir, To prevent disintegration, could not the loop of your Cleative Samp be sufficed by capillary attraction with furt the requisite quantity of some Hydro-Carton from a small fount attached to the lamp without interfering with Maxim's claims - I am quite an experimenter, but on the subject of and offer the suggestion without them ing whether it is practicable or not People thely Yours A. B. Hertchins

Balmon Falls N H Nov 29 80 aa Letter Book m Fells, M. H. Nov. 29 Dan Jin. the matter, the great prouble is in keeping the Electrical the constantly going, is that the conson proints constantly burn away a grow shorter, and that certain feeders are attached to them to keep them the right distince apart. and even you have not get succeeded in over soming this difficulty perfectly. Now I think at any rate, hope) that I have a material that will overcome this difficulty. If you will please to give me the dimensions that you want the size of Soints in overy direction I will

send some to you to test and director of Electricity but I think apperisment whom. There are no electric lights in this vicinity Only bless allow me the opportuor I would test may points myself. nity to test it and it it should Perhaps you will think the you answer the purpose, both of as do not consider my proposition of will, purself in particular, get a sufficient importance to notice to vest benefit pont, of course. but I very wish you will do so; At any rute, please anomer in as perhaps it may know to be some way, wil greatly oblige, just what is wanted I think the best was will be Bours most truly and respectfully, for you to send me a pettern of points mule of wood a photo of Peris, and I will copy it perfects in the substance I wish you to try Aseverance - M.D. I have tested it by subjecting to to the most entense heat I am able to with the blow pipe, and find that I cannot affect to in the last, In fact, the greater the heat I can apply. The harden to hecomes. It may not be a perfect con

Washington De. Statis on forming and Chetne Lights it occurs to me that foundly the Plan of the frame for regnine, it is a very fair gradie of silve from and from in grant forefrien here. I have also seen in that country a tree which feelds foods containing a soft Elastie fine like

list and is much by the hard for pulled manner of the pulled of manner of the state of the same of the state of the state of the state of the same of the state of the state of the same of the same of the state of the same like - trouble - Ting Respectfully Try Horyon (Swell Couches)

ho awina 31 Sands St. Brooklyn Nov. 30, 1880 Flos. A. Edison, .. My noit to the botanical museum of Cornecl University was a very fortunate one .. I not only had an opportunity to examine the collections of endogenous Plants made in Brazil by Props. Hartt and Prentices, but Org Printies, the property Bobany, gave me a quat and of valuable information in regard to localities and about collicting. He also allowed me to take with me a book Exelonging to him on the Palmo of the amazon, Which is now extremely rare I know of but two copies in this country , and this is one of there. The bast fiber comes principally from the upper Rio Negro, above manaos, in the Valley of the amagon. It is taken directly from

the trius of the trees as they chand. I hope however to be able to direct the picture.

so that they will get just what you want, if it from on that particular halm. I send you herewith two small specimens of the assain palm. this is the only execused of could get and for face. The fiber is the best looking they hands. It is too brittle now, but In it was a to history this is are largely, if not in I will entirely to the fact that the room in the protection in which the openious in an Kehr and so unusually dry, the execimens of bast Kept in The same room were also very britte. This 18 A desaí is a common haben about Raia, was the it would be more expensive than almost 13 mil 03 . 3. any other Kind of palm for that renews. I enclose a Kind of a form for a letter to the minister of agriculture and to the thereauts of the northern provinces. of care you should not choose to use

this from , don't first to give them blenty

of topy. The circulant little chances

a straightforward one, pretty sunce as you would write for americans a Englishmen, for it will be eneful principally with Englishmen, and Franchmen.

I have my list of plant about completed. Aucher day wie as the work , I think . It has been a very futurate thereig that the results of the mouth fur getting logithe the results of the work of other men in that country ou the work of plane and endogens. It will have me a great acal of time and labor after I arrive there.

or frivate busines, but I will return the same night, and whall call at Meulo Pack on Thursday the 2 of Dec, for the letter and my friend orders.

The letter of credity was any recions.

John C. Branner

Charles Rice Cager Machinery Chicago Ta. You would much oblige by giving me excly information about high speed evigence, reported to be in satisfactory service in Chiargo M. I.a Edison desires to get the very best high. speed engine and directs me to get complete information; so hope you will aid me with four extensive engineering experience in the Western development. Yours Very truly Tulius Touring Menle Park. N.S.

For Sixellency, the Minister of Agriculture,

Pour Excellency, ...

Permits me to recommend to your distinguished consideration the bearer, my friend can't colaborer, mr. John le Doramer, already.

Nevers in your country in commetion with the sufferial Geological Survey.

Les my indicarors to perfect the electric light and bring it into practical every way wee, I have been able to occur me the amount acruices a strong for the heripose of exploring Marie for certain, regitable film.

In the present state of the development of this

invention; the fixer for which he Bramer returns to Braje is the one things ampundation and your most valuable and heapty ampundation and to the your that on the execut of his orient dopone the success of the distance together. The world is almost invested to Braje for a large number of almost invaluable froduction,

Im . Primuly while gove in searpy of accorther. Aside from the inextimator braque of and benefit of suchfa discovery to the whole civilized world, for Bright jet fiell be falso a new injunitry and therefore a west source of weather and prosperity. ... Aware of the sine our agements .. always held out by your country to accence its discovery and to invention, commend Ing Bramer to you in the full accurance that you will as all in your house to aid him to make his micrion a Thorough spicecees; I am a grant month of the I work Meiterating to your excellency my high rigard acid seteen for yourself, for your wie Emperor and for your country, with processing in the second interest want a some force abidicul accounts and many A: Earthan DE Earthand muco Parke, Nois Juney, He wild State of America, 1 - 1) Dec -1- 1880 Simme best with a coloral to

Letters Ivantes To His Excellency, the President of the Province of Para & " of the amazonao V of Maranhãov " Cerrá Rio Grande do Norte v Parahyba do Norte: . V Pernambuco · & Cagaa » Dergipe Bahia Expirite Santo Rio Grande do Sul São Paulo. . to His Execcany The minister of ingriculture, this de Jamis One circular letter to be shown to all foreign merchants in Brazil) Letter from The Pravilian minister at Wastington to the any of the above, with preference for the minister of a griculture, and the President of the Province of Para

The G. Edis n. Dear Su. It has occumed me that the glass globes thich contain your Electric lights might be made light. the an invented bell and led with carbonic acid gas- This avoiding the necessity of Creating and maintaining a racadow Has this process of promite the combustion of the carbon been tried or patented to

matter but my excu is, that I ful a great interest in your light Yours most Perfy

Onof Thomas A. Edison Menlo Park, N. J. to my communica to my communication of a few days sin at your first possible opportunity as I intend going to Florida to spend the winter of account of my bad states of health. I think I shall sail from New Book It so and so think to worth to hile I will visit go at Mark Park I have strong hopes that the meterial propose will perfectly answer the purpose desired - It is artificially made and composed in great past of corpor, although the carbon is protected, no is not to wear

away I think, by chatricity on by the most entense heat that can be applied to it. I will have and convenient appointunts to test its on yearly, but I have not as their view its. However, I some deem it not worth your time to test it, if you will drop a postal to that offer, so will do me a greet form.

Most respectful jours.

Aleverance

W.E.Dodge:Jr., Prest AA. Cowles, Secy No. 19 Cliff Sheet Stenogi aphic Letter P.O.Box 2575. ple hen 18 This A. Edison Es Menlo Park, J Dear Fir. I wish to get some Electrical tiste made the conductivity of Copper these theoryon kindly favor me with the address of some competent person to whom I can apply , Very touly yourse.

1 Miser 32 50 quest lemperalum no 1/2 Cleodouff other Known Element nature is as refrocting orts 344 Brown St New Elevent 3" 1880 9 willtalk biz Dear Sir. For some time part some considerable attent -ious and study in order to forme some adea. as to what night be Electric light. Suring the hunteds investigations that I have been able to makes I have formed the candinian that Carbon or any carbonited

substance is not the with me in any herfection of the Electric advantages that may light - Fullturmore be derived from what I believe that I have I may suggest I will formed ideas from take your word of honor which can be debelfed for that and will a # skettance which immediately submiting will prove to be the ideas to far and perfection of the Electric light and it is will abide by your my desire to place decision as to then I ideas in the hands As for se I I some person or persons have been able to see learn who have the facilities from observation and from to prove of disprove reading my ideas are their value, of any encouraging word Very July yours Dan not after advance Byron C. Worduff. that you will share

Deorfi Dec. 6"1889

Deorfi Dec. 6"1889

Deorfi Decent a come copy

Sent Selver and Branch of film monty

He dand one in Branch of film monty

He dand one in solution in Se al

He dand one in solution in Se al

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Selver to be abo

mr. Oarman ne ma Quarfor - Drawn

received a letter from Mr. Branner in which his says "Jell Mr. Carman so be sure to sent me Cipher For Cabbing which aends tellers"

Please to send chiefe for Mr. Bramers & alary so my order of send word by separate inote as soon as you cannot it living your affathy Murker Very Imp yours led Nethology

Dee Lelle Bux Pay 746

Part Booten. Takens Chancey

18 chathestrate

New Yorks Dack 1880

Brif. Colicion

Mo have they day last

to your address for explores

(8) two handles of fahance

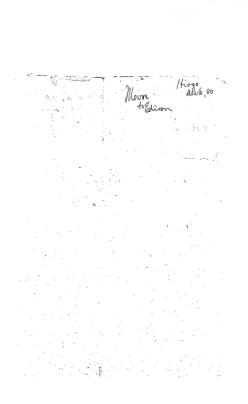
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Samples Belgie Olking



you clear are 6 ased repor usuffent Experience New York 344 Brown yesterdays date in which you say that Carone withstailed the higher temperature of any Known cleaner Anothere and that a I have discorene new Element you prefored to talk business was received this All. I am not a chimiet and count-pay that I have discovered any new Element in Shatur I have emply formed and idea thou

which I would like to this place the asks have you pass Judgment and subject to the Carbon as obtained highest passible present and used heretofore is which must be perfectly in form the fruit of steady in one direction imperfect combustion. The presume und The pressure used From this fact should be in my opinion I have drawn the at least ten times as following conditions agreet for equare under fibrous pate any begitte as the force send to fibrous patestance which generate the Electric shall be found beet current adopted to the purpose light. current used for the and subject it to perfect Electricity is combustion, Take the the transmission of ashes and remove or deance Force, Carbon is Ivaling from everything which is Electrical defosit - void and the absolute fruit of print of atmospherial canditions. Asher-the fruit of the polished steel mones combined clements. Therefore use Ashes as of great strength, Santo and intermediary to

Respectfully yours

Buttune de 7/80 laj lica Edison about illamine land, as process with a richy treat questions at Back to a word server surprised & see thinks duing formated any things weich model affect line a cooperate

& sular Le. ed by the Subject.

New York, Ser. 8 1880. J. a. Edisan Eng. Alenes Fark, S.J. we apply to the vestil V. F. Butter, Havan W. Butler's letter

New York, Dec 9 188 y dear Edrag Jun letter Received Many Thanks. Shavy time I can be of serve to your Call on me There is a sort of boom going in, on the chreet Toway on all Electic highto. The Grown are Onging Brush , Faller & maxim. I Thento I Can get at the bottem

of the movement would benefit ym. The movement is underty me pregulate to the Evisar Light What do you thanke? July Juns

ieras 9 sec 1880 and by 3th ELA SIA Dol.

rece Sa fut them in ap enguine, is it with while for The confliction of the bills. me to make any prepare--time for the introduction of Tofanni I have seen the Co trie light, that have been into govelight mond - Spiram -duced by others are objects be done as well din monthy den my judgment unlen they, hence when the builting will my be very quilly improved be completed divoit bother Hey will not enter generally into Domistic uso. withitnow If I indented outly your light is the only one produced Very Kinky in Nacoun, difes, yours Common be judged by the failure of others. Stoccombone that ifyour My building is on a priniment design introducing your lights Corner, lot 88 by 109 thinks by influings, some aungement is 83 by 87 the afaitments could be mude with the of 9 10 Some and an aftery City Water Hords for the The will give about 100 win ton acofther forderand from which the light my be to deen if unit, there being bottomes My feet in witing, is to on 12 Apartment

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Metuchen

Yokohama

Garment choice electrice,

1 1 to Paid



The Southwark Foundry and Machine Company,

The Porter-Allen High Speed Steam-Engine.

W. H. MERRICK, President, C. T. PORTER, Vice-President, G. A. BOSTWICK, Secretary.

PHILADELPHIA LICO IN 188 ()

Jang! " Com form 13' at significant 13' at significant of deline in great and lace and the sake we have some of deline in the we have a form of deline freshound we have to fresh with me has decular hurry for the engine you nest to me for the well in the price of the price of the price of the significant of t

SOUTHWARK FOUNDRY & MACHINE CO.

Saluen Falls Not Dec 108 Telmon Fells, MAG, Dac co Orof. Edison, Don Sio, _ mail with this I sent wow few points of the substance I suggested for you to tay in place of pine Carbon points, which I morny annot deane for you to test had I not hem just them sooner They have but little carbon in them as I have have difficult in obtaining the substance and fine power which is necessary I meaum to incorporate & have thom to well Gran pieces we very hard as von

well know, I too herd to be receive them) and I will make reduced to a powder in a montar, some more of the apart size we therefore I have ground it up by attriction as I had to wish for al also incomponents a larger quant (profuntion) of Grand process and incorporated in the points I send were carbon in Them, which may likely will be what is needed - I presume that they can be made it some nine tenthy carbon if necessary It is all mixed in a soft state at herdens new repets. If I know what some would suit you hert. I would make them of that size and way likely it will be All is, blase test there of we will all let me know to result, al make any suggestion to which while wift, but not knowing o occur to soi, al I will not have made them of different sopes, in hopes some of them would suit whom them . It certainly seems to me that this substance can be son in that respect. them, al of they do not work made to a nown the required purpose the to produce getters to affect that I am point it to produce getters to affect these proints it the but cleatures man to in more than I can tell I do well, let me know what size you would proper it as to is difficult to reduce the size whom they get so wish that I had facilities for hand so they will by the time you

Thorough testing , myself - If so I would not trouble you to do so. Should it turn out to be the substance wanted, you shall receive the hanafit as well as myself. I shall visit Florida soon on account of my ill health, il I my encouragement is given in the motter int I can be if my food in the matter, I will call on you in my way thather and tell you all I know about The metter Olean let me han from you in a flow day; as I shall go to Florida (when I have a home) in 2 a 3 Most trul pours, Severance, M. D.

LADD TOBACCO COMPANY. 21 North Main Street. Charles Edison Con Aundin Anne (Tel 15th) asking if gones Cano you are now as intently recepted a end of you with the two if you will be with in which I can by the matter before you when I beling you will take Kindly thit Much Quanties a pertable give A motion Electric motor about & horaspores the Carles running that but little figure inscends with this am revolutionize and the hads -trus of this roster countries of The town of from the Courte funtion ymithale But we 1/43.

Amquigan Pistqiqt Caleggaph Co. This of Edward Expres

This of Edward Expres

O when Su Shaw been informed that your Electric the-can descent degling to as about to Commence business in Ny, If you can make use of my 239 Broadway

quality of bamboo which would answer your par shortd could be procuse in Peri or Bolivia. Menlo Park They say :- " The cost of transportation from "the interior of Bolivia referring to would be very heavy; while with no the ar-"thele used is not proformal de to you, we " duced in the country, of particulars as to the "but is imported from Guayagnil We have cost in large quantities. written to me agent at tere, We trust you mee "that part to send you find these details of samples of the various interest. hinds grown in Emador. Our friends at The article grows in im-Kima wife in that mente quantities on the they do not think a banks of the Guaraquil

Factori Clauser Samples reach is from Ecuador, they shall be forwarded to you. Dear Vir, Jane very truly, Fablic I Chamer Answer de letter bank haze 744 The Thin

PHYSICAL LABORATORY, State Agricultural College. Amer Jana Dec 22 1. 21 E Editor. Fagore Last Summer of has encouraged in the muspet of being able to Sunchase from your one on more of your Cothow damp. of Do ciliatis That you dans more I rope for nill do so. Af you have there for Rade mould be workness six of theme, I am to deline a lection soon ou Electric Solding and mich very recent, to have one for orghipatione, Hoping treed were suprais your valuable line Vent financely Jours Malla comber

With pleasure but can't go today when will it do Gonney

any Evening let maknow

day shead

MEMORANDUM.

New York, Dec 2 1 1880

Stollar A Edition

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120 E26 ALL a he Reta constation to your next Exhibition wh The fiver a few doys

for a consepordent of way the leading Paris papers? distinguished Enedenting 120826 44 P.S. Also a lie Ret of odmission that would be good any day bruit work

vow still day ing now plans lawfor. If the de I can Justiche I dain to de an or port in alis me thorny ly porter (about its manufacture written a report on glass circulare I think rule and my assertion exposition defranchy in working may Truck may

Jan tule to

Treasury Department.

SECOND COMPTROLLER'S OFFICE,

Washington, D. C., 15th October, 1880.

I shall have ready for delivery in about two months my report on "Glass at the Paris Exposition of 1878," which will appear under the authority of the United States Exposition Commission.

This report will contain about 150 pages of printed matter, and will give valuable information on the following subjects:

Paise and window glass, their modilizery, tools, oreas, and frameses, adained, enamelled, feconisde, engraved, and and served, and fasted state-glass; rough, pollabel, and stated winds, colored, and fasted state-glass; rough, pollabel, and stated winds, colored, and fasted state-glass; rough, pollabel, and the state of the state

rification, action of air, oxygen, light, water, acids, and alkalies upon glass; materials employed, and where found; pot and fire-brief making; mechanical tools; comparisons between foreign and American glass making, etc., etc.

Should you wish to obtain copies of said report, I will send them to you, as soon as published, free of postage, on receipt of \$1.25 per copy, in paper covers:

bound in cloth. Respectfully,

CHARLES COLNÉ.

NO 2

Downer my

Phense ascilan from operator of Punto Rossa florida if lange frohing pale Came grows near ET a Edwar

THE LY Of fish them any quentry of fish them any quentry of poles at brifton fla

a I Sowner

A J Sowner

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N newgork

DUS Cable Office 16 Broad Street New York

They dear Sir,

Suitend doing my self.
The pleasure of virtuing theulo Park on Suesday went to see your lamps. Mr Batchelor Kindly promised to the sue some of them burning in rooms of a house.

Thay I ask whether it will be in the convenient for him to see me on suesday say.

Mit & Mir Ward and the or two friends will accompany me. Lam, den si , Yours very truly alextuurhead F. a. Edica egg gw Jawa de toward

6 newyork 16 Edison

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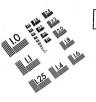
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